

Algoritma TA.m

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function varargout = TA(varargin)
% TA M-file for TA.fig
%     TA, by itself, creates a new TA or raises the
existing
%     singleton*.
%
% H = TA returns the handle to a new TA or the
handle to
% the existing singleton*.
%
% TA('CALLBACK',hObject,eventData,handles,...) calls the local
% function named CALLBACK in TA.M with the
given input arguments.
%
% TA('Property','Value',...) creates a new TA or
raises the
% existing singleton*. Starting from the left,
property value pairs are
% applied to the GUI before TA_OpeningFunction
gets called. An
% unrecognized property name or invalid value
makes property application
% stop. All inputs are passed to TA_OpeningFcn
via varargin.
%
% *See GUI Options on GUIDE's Tools menu.
Choose "GUI allows only one
% instance to run (singleton)".
%
% See also: GUIDE, GUIDATA, GUIHANDLES

% Edit the above text to modify the response to help
TA

% Last Modified by GUIDE v2.5 29-Jan-2008 23:22:01

% Begin initialization code - DO NOT EDIT
gui_Singleton = 1;
gui_State = struct('gui_Name', '', 'mfilename', ...
    'gui_Singleton', gui_Singleton, ...
    'gui_OpeningFcn', @TA_OpeningFcn, ...
    'gui_OutputFcn', @TA_OutputFcn, ...
    'gui_LayoutFcn', [], ...
    'gui_Callback', []);
if nargin && ischar(varargin{1})
    gui_State.gui_Callback = str2func(varargin{1});
end

if nargout
    [varargout{1:nargout}] = gui_mainfcn(gui_State, ...
        varargin{:});
else
    gui_mainfcn(gui_State, varargin{:});
end
% End initialization code - DO NOT EDIT

% --- Executes just before TA is made visible.
function TA_OpeningFcn(hObject, eventdata, handles,
varargin)
% This function has no output args, see OutputFcn.
% hObject handle to figure
% eventdata reserved - to be defined in a future version
of MATLAB
% handles structure with handles and user data (see
GUIDATA)
% varargin command line arguments to TA (see
VARARGIN)

% Choose default command line output for TA
handles.output = hObject;

% Update handles structure
guidata(hObject, handles);

% UIWAIT makes TA wait for user response (see
UIRESUME)
% uiwait(handles.figure1);

% --- Outputs from this function are returned to the
command line.
function varargout = TA_OutputFcn(hObject,
eventdata, handles)
% varargout cell array for returning output args (see
VARARGOUT);
% hObject handle to figure
% eventdata reserved - to be defined in a future version
of MATLAB
% handles structure with handles and user data (see
GUIDATA)

% Get default command line output from handles
structure
varargout{1} = handles.output;

% --- Executes on button press in btnbukagbr.
function btnbukagbr_Callback(hObject, eventdata,
handles)
% hObject handle to btnbukagbr (see GCBO)
% eventdata reserved - to be defined in a future version
of MATLAB
% handles structure with handles and user data (see
GUIDATA)

% --- Executes on button press in btnkenali.
function btnkenali_Callback(hObject, eventdata,
handles)
% hObject handle to btnkenali (see GCBO)

% eventdata reserved - to be defined in a future version
of MATLAB
% handles structure with handles and user data (see
GUIDATA)

image1=imread('abcde1.bmp');
image2=imread('abcde2.bmp');
image3=imread('abcde3.bmp');
image4=imread('abcde4.bmp');
image5=imread('abcde5.bmp');
image6=imread('abcde6.bmp');
image7=imread('abcde7.bmp');
image8=imread('abcde8.bmp');
image9=imread('abcde9.bmp');
image10=imread('abcde10.bmp');
image11=imread('fghij1.bmp');
image12=imread('fghij2.bmp');
image13=imread('fghij3.bmp');
image14=imread('fghij4.bmp');

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image15=imread('fghij5.bmp');
image16=imread('fghij6.bmp');
image17=imread('fghij7.bmp');
image18=imread('fghij8.bmp');
image19=imread('fghij9.bmp');
image20=imread('fghij10.bmp');
image21=imread('klmno1.bmp');
image22=imread('klmno2.bmp');
image23=imread('klmno3.bmp');
image24=imread('klmno4.bmp');
image25=imread('klmno5.bmp');
image26=imread('klmno6.bmp');
image27=imread('klmno7.bmp');
image28=imread('klmno8.bmp');
image29=imread('klmno9.bmp');
image30=imread('klmno10.bmp');
image31=imread('pqrst1.bmp');
image32=imread('pqrst2.bmp');
image33=imread('pqrst3.bmp');
image34=imread('pqrst4.bmp');
image35=imread('pqrst5.bmp');
image36=imread('pqrst6.bmp');
image37=imread('pqrst7.bmp');
image38=imread('pqrst8.bmp');
image39=imread('pqrst9.bmp');
image40=imread('pqrst10.bmp');
image41=imread('uvwxy1.bmp');
image42=imread('uvwxy2.bmp');
image43=imread('uvwxy3.bmp');
image44=imread('uvwxy4.bmp');
image45=imread('uvwxy5.bmp');
image46=imread('uvwxy6.bmp');
image47=imread('uvwxy7.bmp');
image48=imread('uvwxy8.bmp');
image49=imread('uvwxy9.bmp');
image50=imread('uvwxy10.bmp');
image51=imread('z1.bmp');
image52=imread('z2.bmp');
image53=imread('z3.bmp');
image54=imread('z4.bmp');
image55=imread('z5.bmp');
image56=imread('z6.bmp');
image57=imread('z7.bmp');
image58=imread('z8.bmp');
image59=imread('z9.bmp');
image60=imread('z10.bmp');

%Database huruf-huruf
a1=image1(1:14,1:14);
a1=single(a1);
b1=image1(1:14,15:28);
b1=single(b1);
c1=image1(1:14,29:42);
c1=single(c1);
d1=image1(1:14,43:56);
d1=single(d1);
e1=image1(1:14,57:70);
e1=single(e1);
f1=image11(1:14,1:14);
f1=single(f1);
g1=image11(1:14,15:28);
g1=single(g1);
h1=image11(1:14,29:42);
h1=single(h1);
i1=image11(1:14,43:56);
i1=single(i1);
j1=image11(1:14,57:70);
j1=single(j1);
k1=image21(1:14,1:14);
k1=single(k1);

l1=image21(1:14,15:28);
l1=single(l1);
m1=image21(1:14,29:42);
m1=single(m1);
n1=image21(1:14,43:56);
n1=single(n1);
o1=image21(1:14,57:70);
o1=single(o1);
p1=image31(1:14,1:14);
p1=single(p1);
q1=image31(1:14,15:28);
q1=single(q1);
r1=image31(1:14,29:42);
r1=single(r1);
s1=image31(1:14,43:56);
s1=single(s1);
t1=image31(1:14,57:70);
t1=single(t1);
u1=image41(1:14,1:14);
u1=single(u1);
v1=image41(1:14,15:28);
v1=single(v1);
w1=image41(1:14,29:42);
w1=single(w1);
x1=image41(1:14,43:56);
x1=single(x1);
y1=image41(1:14,57:70);
y1=single(y1);
z1=image51(1:14,1:14);
z1=single(z1);

a2=image2(1:14,1:14);
a2=single(a2);
b2=image2(1:14,15:28);
b2=single(b2);
c2=image2(1:14,29:42);
c2=single(c2);
d2=image2(1:14,43:56);
d2=single(d2);
e2=image2(1:14,57:70);
e2=single(e2);
f2=image12(1:14,1:14);
f2=single(f2);
g2=image12(1:14,15:28);
g2=single(g2);
h2=image12(1:14,29:42);
h2=single(h2);
i2=image12(1:14,43:56);
i2=single(i2);
j2=image12(1:14,57:70);
j2=single(j2);
k2=image22(1:14,1:14);
k2=single(k2);
l2=image22(1:14,15:28);
l2=single(l2);
m2=image22(1:14,29:42);
m2=single(m2);
n2=image22(1:14,43:56);
n2=single(n2);
o2=image22(1:14,57:70);
o2=single(o2);
p2=image32(1:14,1:14);
p2=single(p2);
q2=image32(1:14,15:28);
q2=single(q2);
r2=image32(1:14,29:42);
r2=single(r2);
s2=image32(1:14,43:56);
s2=single(s2);

l1=reshape(l1,1,196);
m1=reshape(m1,1,196);
n1=reshape(n1,1,196);
o1=reshape(o1,1,196);
p1=reshape(p1,1,196);
q1=reshape(q1,1,196);
r1=reshape(r1,1,196);
s1=reshape(s1,1,196);
t1=reshape(t1,1,196);
u1=reshape(u1,1,196);
v1=reshape(v1,1,196);
w1=reshape(w1,1,196);
x1=reshape(x1,1,196);
y1=reshape(y1,1,196);
z1=reshape(z1,1,196);

a2=reshape(a2,1,196);
b2=reshape(b2,1,196);
c2=reshape(c2,1,196);
d2=reshape(d2,1,196);
e2=reshape(e2,1,196);
f2=reshape(f2,1,196);
g2=reshape(g2,1,196);
h2=reshape(h2,1,196);
i2=reshape(i2,1,196);
j2=reshape(j2,1,196);
k2=reshape(k2,1,196);
l2=reshape(l2,1,196);
m2=reshape(m2,1,196);
n2=reshape(n2,1,196);
o2=reshape(o2,1,196);
p2=reshape(p2,1,196);
q2=reshape(q2,1,196);
r2=reshape(r2,1,196);
s2=reshape(s2,1,196);

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t2=image32(1:14,57:70);
t2=single(t2);
u2=image42(1:14,1:14);
u2=single(u2);
v2=image42(1:14,15:28);
v2=single(v2);
w2=image42(1:14,29:42);
w2=single(w2);
x2=image42(1:14,43:56);
x2=single(x2);
y2=image42(1:14,57:70);
y2=single(y2);
z2=image52(1:14,1:14);
z2=single(z2);

a3=image3(1:14,1:14);
a3=single(a3);
b3=image3(1:14,15:28);
b3=single(b3);
c3=image3(1:14,29:42);
c3=single(c3);
d3=image3(1:14,43:56);
d3=single(d3);
e3=image3(1:14,57:70);
e3=single(e3);
f3=image13(1:14,1:14);
f3=single(f3);
g3=image13(1:14,15:28);
g3=single(g3);
h3=image13(1:14,29:42);
h3=single(h3);
i3=image13(1:14,43:56);
i3=single(i3);
j3=image13(1:14,57:70);
j3=single(j3);
k3=image23(1:14,1:14);
k3=single(k3);
l3=image23(1:14,15:28);
l3=single(l3);
m3=image23(1:14,29:42);
m3=single(m3);
n3=image23(1:14,43:56);
n3=single(n3);
o3=image23(1:14,57:70);
o3=single(o3);
p3=image33(1:14,1:14);
p3=single(p3);
q3=image33(1:14,15:28);
q3=single(q3);
r3=image33(1:14,29:42);
r3=single(r3);
s3=image33(1:14,43:56);
s3=single(s3);
t3=image33(1:14,57:70);
t3=single(t3);
u3=image43(1:14,1:14);
u3=single(u3);
v3=image43(1:14,15:28);
v3=single(v3);
w3=image43(1:14,29:42);
w3=single(w3);
x3=image43(1:14,43:56);
x3=single(x3);
y3=image43(1:14,57:70);
y3=single(y3);
z3=image53(1:14,1:14);
z3=single(z3);

a4=image4(1:14,1:14);
a4=single(a4);

t2=reshape(t2,1,196);
u2=reshape(u2,1,196);
v2=reshape(v2,1,196);
w2=reshape(w2,1,196);
x2=reshape(x2,1,196);
y2=reshape(y2,1,196);
z2=reshape(z2,1,196);

a3=reshape(a3,1,196);
b3=reshape(b3,1,196);
c3=reshape(c3,1,196);
d3=reshape(d3,1,196);
e3=reshape(e3,1,196);
f3=reshape(f3,1,196);
g3=reshape(g3,1,196);
h3=reshape(h3,1,196);
i3=reshape(i3,1,196);
j3=reshape(j3,1,196);
k3=reshape(k3,1,196);
l3=reshape(l3,1,196);
m3=reshape(m3,1,196);
n3=reshape(n3,1,196);
o3=reshape(o3,1,196);
p3=reshape(p3,1,196);
q3=reshape(q3,1,196);
r3=reshape(r3,1,196);
s3=reshape(s3,1,196);
t3=reshape(t3,1,196);
u3=reshape(u3,1,196);
v3=reshape(v3,1,196);
w3=reshape(w3,1,196);
x3=reshape(x3,1,196);
y3=reshape(y3,1,196);
z3=reshape(z3,1,196);

a4=reshape(a4,1,196);

b4=image4(1:14,15:28);
b4=single(b4);
c4=image4(1:14,29:42);
c4=single(c4);
d4=image4(1:14,43:56);
d4=single(d4);
e4=image4(1:14,57:70);
e4=single(e4);
f4=image14(1:14,1:14);
f4=single(f4);
g4=image14(1:14,15:28);
g4=single(g4);
h4=image14(1:14,29:42);
h4=single(h4);
i4=image14(1:14,43:56);
i4=single(i4);
j4=image14(1:14,57:70);
j4=single(j4);
k4=image24(1:14,1:14);
k4=single(k4);
l4=image24(1:14,15:28);
l4=single(l4);
m4=image24(1:14,29:42);
m4=single(m4);
n4=image24(1:14,43:56);
n4=single(n4);
o4=image24(1:14,57:70);
o4=single(o4);
p4=image34(1:14,1:14);
p4=single(p4);
q4=image34(1:14,15:28);
q4=single(q4);
r4=image34(1:14,29:42);
r4=single(r4);
s4=image34(1:14,43:56);
s4=single(s4);
t4=image34(1:14,57:70);
t4=single(t4);
u4=image44(1:14,1:14);
u4=single(u4);
v4=image44(1:14,15:28);
v4=single(v4);
w4=image44(1:14,29:42);
w4=single(w4);
x4=image44(1:14,43:56);
x4=single(x4);
y4=image44(1:14,57:70);
y4=single(y4);
z4=image54(1:14,1:14);
z4=single(z4);

a5=image5(1:14,1:14);
a5=single(a5);
b5=image5(1:14,15:28);
b5=single(b5);
c5=image5(1:14,29:42);
c5=single(c5);
d5=image5(1:14,43:56);
d5=single(d5);
e5=image5(1:14,57:70);
e5=single(e5);
f5=image15(1:14,1:14);
f5=single(f5);
g5=image15(1:14,15:28);
g5=single(g5);
h5=image15(1:14,29:42);
h5=single(h5);
i5=image15(1:14,43:56);
i5=single(i5);
j5=image15(1:14,57:70);
j5=single(j5);

b4=reshape(b4,1,196);
c4=reshape(c4,1,196);
d4=reshape(d4,1,196);
e4=reshape(e4,1,196);
f4=reshape(f4,1,196);
g4=reshape(g4,1,196);
h4=reshape(h4,1,196);
i4=reshape(i4,1,196);
j4=reshape(j4,1,196);
k4=reshape(k4,1,196);
l4=reshape(l4,1,196);
m4=reshape(m4,1,196);
n4=reshape(n4,1,196);
o4=reshape(o4,1,196);
p4=reshape(p4,1,196);
q4=reshape(q4,1,196);
r4=reshape(r4,1,196);
s4=reshape(s4,1,196);
t4=reshape(t4,1,196);
u4=reshape(u4,1,196);
v4=reshape(v4,1,196);
w4=reshape(w4,1,196);
x4=reshape(x4,1,196);
y4=reshape(y4,1,196);
z4=reshape(z4,1,196);

a5=reshape(a5,1,196);
b5=reshape(b5,1,196);
c5=reshape(c5,1,196);
d5=reshape(d5,1,196);
e5=reshape(e5,1,196);
f5=reshape(f5,1,196);
g5=reshape(g5,1,196);
h5=reshape(h5,1,196);
i5=reshape(i5,1,196);
j5=reshape(j5,1,196);

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k5=image25(1:14,1:14);
k5=single(k5);
l5=image25(1:14,15:28);
l5=single(l5);
m5=image25(1:14,29:42);
m5=single(m5);
n5=image25(1:14,43:56);
n5=single(n5);
o5=image25(1:14,57:70);
o5=single(o5);
p5=image35(1:14,1:14);
p5=single(p5);
q5=image35(1:14,15:28);
q5=single(q5);
r5=image35(1:14,29:42);
r5=single(r5);
s5=image35(1:14,43:56);
s5=single(s5);
t5=image35(1:14,57:70);
t5=single(t5);
u5=image45(1:14,1:14);
u5=single(u5);
v5=image45(1:14,15:28);
v5=single(v5);
w5=image45(1:14,29:42);
w5=single(w5);
x5=image45(1:14,43:56);
x5=single(x5);
y5=image45(1:14,57:70);
y5=single(y5);
z5=image55(1:14,1:14);
z5=single(z5);

a6=image6(1:14,1:14);
a6=single(a6);
b6=image6(1:14,15:28);
b6=single(b6);
c6=image6(1:14,29:42);
c6=single(c6);
d6=image6(1:14,43:56);
d6=single(d6);
e6=image6(1:14,57:70);
e6=single(e6);
f6=image16(1:14,1:14);
f6=single(f6);
g6=image16(1:14,15:28);
g6=single(g6);
h6=image16(1:14,29:42);
h6=single(h6);
i6=image16(1:14,43:56);
i6=single(i6);
j6=image16(1:14,57:70);
j6=single(j6);
k6=image26(1:14,1:14);
k6=single(k6);
l6=image26(1:14,15:28);
l6=single(l6);
m6=image26(1:14,29:42);
m6=single(m6);
n6=image26(1:14,43:56);
n6=single(n6);
o6=image26(1:14,57:70);
o6=single(o6);
p6=image36(1:14,1:14);
p6=single(p6);
q6=image36(1:14,15:28);
q6=single(q6);
r6=image36(1:14,29:42);
r6=single(r6);
s6=image36(1:14,43:56);
s6=single(s6);

k5=reshape(k5,1,196);
l5=reshape(l5,1,196);
m5=reshape(m5,1,196);
n5=reshape(n5,1,196);
o5=reshape(o5,1,196);
p5=reshape(p5,1,196);
q5=reshape(q5,1,196);
r5=reshape(r5,1,196);
s5=reshape(s5,1,196);
t5=reshape(t5,1,196);
u5=reshape(u5,1,196);
v5=reshape(v5,1,196);
w5=reshape(w5,1,196);
x5=reshape(x5,1,196);
y5=reshape(y5,1,196);
z5=reshape(z5,1,196);

a6=reshape(a6,1,196);
b6=reshape(b6,1,196);
c6=reshape(c6,1,196);
d6=reshape(d6,1,196);
e6=reshape(e6,1,196);
f6=reshape(f6,1,196);
g6=reshape(g6,1,196);
h6=reshape(h6,1,196);
i6=reshape(i6,1,196);
j6=reshape(j6,1,196);
k6=reshape(k6,1,196);
l6=reshape(l6,1,196);
m6=reshape(m6,1,196);
n6=reshape(n6,1,196);
o6=reshape(o6,1,196);
p6=reshape(p6,1,196);
q6=reshape(q6,1,196);
r6=reshape(r6,1,196);
s6=reshape(s6,1,196);

t6=image36(1:14,57:70);
t6=single(t6);
u6=image46(1:14,1:14);
u6=single(u6);
v6=image46(1:14,15:28);
v6=single(v6);
w6=image46(1:14,29:42);
w6=single(w6);
x6=image46(1:14,43:56);
x6=single(x6);
y6=image46(1:14,57:70);
y6=single(y6);
z6=image56(1:14,1:14);
z6=single(z6);

a7=image7(1:14,1:14);
a7=single(a7);
b7=image7(1:14,15:28);
b7=single(b7);
c7=image7(1:14,29:42);
c7=single(c7);
d7=image7(1:14,43:56);
d7=single(d7);
e7=image7(1:14,57:70);
e7=single(e7);
f7=image17(1:14,1:14);
f7=single(f7);
g7=image17(1:14,15:28);
g7=single(g7);
h7=image17(1:14,29:42);
h7=single(h7);
i7=image17(1:14,43:56);
i7=single(i7);
j7=image17(1:14,57:70);
j7=single(j7);
k7=image27(1:14,1:14);
k7=single(k7);
l7=image27(1:14,15:28);
l7=single(l7);
m7=image27(1:14,29:42);
m7=single(m7);
n7=image27(1:14,43:56);
n7=single(n7);
o7=image27(1:14,57:70);
o7=single(o7);
p7=image37(1:14,1:14);
p7=single(p7);
q7=image37(1:14,15:28);
q7=single(q7);
r7=image37(1:14,29:42);
r7=single(r7);
s7=image37(1:14,43:56);
s7=single(s7);
t7=image37(1:14,57:70);
t7=single(t7);
u7=image47(1:14,1:14);
u7=single(u7);
v7=image47(1:14,15:28);
v7=single(v7);
w7=image47(1:14,29:42);
w7=single(w7);
x7=image47(1:14,43:56);
x7=single(x7);
y7=image47(1:14,57:70);
y7=single(y7);
z7=image57(1:14,1:14);
z7=single(z7);

a8=image8(1:14,1:14);
a8=single(a8);

t6=reshape(t6,1,196);
u6=reshape(u6,1,196);
v6=reshape(v6,1,196);
w6=reshape(w6,1,196);
x6=reshape(x6,1,196);
y6=reshape(y6,1,196);
z6=reshape(z6,1,196);

a7=reshape(a7,1,196);
b7=reshape(b7,1,196);
c7=reshape(c7,1,196);
d7=reshape(d7,1,196);
e7=reshape(e7,1,196);
f7=reshape(f7,1,196);
g7=reshape(g7,1,196);
h7=reshape(h7,1,196);
i7=reshape(i7,1,196);
j7=reshape(j7,1,196);
k7=reshape(k7,1,196);
l7=reshape(l7,1,196);
m7=reshape(m7,1,196);
n7=reshape(n7,1,196);
o7=reshape(o7,1,196);
p7=reshape(p7,1,196);
q7=reshape(q7,1,196);
r7=reshape(r7,1,196);
s7=reshape(s7,1,196);
t7=reshape(t7,1,196);
u7=reshape(u7,1,196);
v7=reshape(v7,1,196);
w7=reshape(w7,1,196);
x7=reshape(x7,1,196);
y7=reshape(y7,1,196);
z7=reshape(z7,1,196);

a8=reshape(a8,1,196);

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```

b8=image8(1:14,15:28);
b8=single(b8);
c8=image8(1:14,29:42);
c8=single(c8);
d8=image8(1:14,43:56);
d8=single(d8);
e8=image8(1:14,57:70);
e8=single(e8);
f8=image18(1:14,1:14);
f8=single(f8);
g8=image18(1:14,15:28);
g8=single(g8);
h8=image18(1:14,29:42);
h8=single(h8);
i8=image18(1:14,43:56);
i8=single(i8);
j8=image18(1:14,57:70);
j8=single(j8);
k8=image28(1:14,1:14);
k8=single(k8);
l8=image28(1:14,15:28);
l8=single(l8);
m8=image28(1:14,29:42);
m8=single(m8);
n8=image28(1:14,43:56);
n8=single(n8);
o8=image28(1:14,57:70);
o8=single(o8);
p8=image38(1:14,1:14);
p8=single(p8);
q8=image38(1:14,15:28);
q8=single(q8);
r8=image38(1:14,29:42);
r8=single(r8);
s8=image38(1:14,43:56);
s8=single(s8);
t8=image38(1:14,57:70);
t8=single(t8);
u8=image48(1:14,1:14);
u8=single(u8);
v8=image48(1:14,15:28);
v8=single(v8);
w8=image48(1:14,29:42);
w8=single(w8);
x8=image48(1:14,43:56);
x8=single(x8);
y8=image48(1:14,57:70);
y8=single(y8);
z8=image58(1:14,1:14);
z8=single(z8);

a9=image9(1:14,1:14);
a9=single(a9);
b9=image9(1:14,15:28);
b9=single(b9);
c9=image9(1:14,29:42);
c9=single(c9);
d9=image9(1:14,43:56);
d9=single(d9);
e9=image9(1:14,57:70);
e9=single(e9);
f9=image19(1:14,1:14);
f9=single(f9);
g9=image19(1:14,15:28);
g9=single(g9);
h9=image19(1:14,29:42);
h9=single(h9);
i9=image19(1:14,43:56);
i9=single(i9);
j9=image19(1:14,57:70);
j9=single(j9);

b8=reshape(b8,1,196);
c8=reshape(c8,1,196);
d8=reshape(d8,1,196);
e8=reshape(e8,1,196);
f8=reshape(f8,1,196);
g8=reshape(g8,1,196);
h8=reshape(h8,1,196);
i8=reshape(i8,1,196);
j8=reshape(j8,1,196);
k8=reshape(k8,1,196);
l8=reshape(l8,1,196);
m8=reshape(m8,1,196);
n8=reshape(n8,1,196);
o8=reshape(o8,1,196);
p8=reshape(p8,1,196);
q8=reshape(q8,1,196);
r8=reshape(r8,1,196);
s8=reshape(s8,1,196);
t8=reshape(t8,1,196);
u8=reshape(u8,1,196);
v8=reshape(v8,1,196);
w8=reshape(w8,1,196);
x8=reshape(x8,1,196);
y8=reshape(y8,1,196);
z8=reshape(z8,1,196);

a9=reshape(a9,1,196);
b9=reshape(b9,1,196);
c9=reshape(c9,1,196);
d9=reshape(d9,1,196);
e9=reshape(e9,1,196);
f9=reshape(f9,1,196);
g9=reshape(g9,1,196);
h9=reshape(h9,1,196);
i9=reshape(i9,1,196);
j9=reshape(j9,1,196);

k9=image29(1:14,1:14);
k9=single(k9);
l9=image29(1:14,15:28);
l9=single(l9);
m9=image29(1:14,29:42);
m9=single(m9);
n9=image29(1:14,43:56);
n9=single(n9);
o9=image29(1:14,57:70);
o9=single(o9);
p9=image39(1:14,1:14);
p9=single(p9);
q9=image39(1:14,15:28);
q9=single(q9);
r9=image39(1:14,29:42);
r9=single(r9);
s9=image39(1:14,43:56);
s9=single(s9);
t9=image39(1:14,57:70);
t9=single(t9);
u9=image49(1:14,1:14);
u9=single(u9);
v9=image49(1:14,15:28);
v9=single(v9);
w9=image49(1:14,29:42);
w9=single(w9);
x9=image49(1:14,43:56);
x9=single(x9);
y9=image49(1:14,57:70);
y9=single(y9);
z9=image59(1:14,1:14);
z9=single(z9);

a10=image10(1:14,1:14);
a10=single(a10);
b10=image10(1:14,15:28);
b10=single(b10);
c10=image10(1:14,29:42);
c10=single(c10);
d10=image10(1:14,43:56);
d10=single(d10);
e10=image10(1:14,57:70);
e10=single(e10);
f10=image20(1:14,1:14);
f10=single(f10);
g10=image20(1:14,15:28);
g10=single(g10);
h10=image20(1:14,29:42);
h10=single(h10);
i10=image20(1:14,43:56);
i10=single(i10);
j10=image20(1:14,57:70);
j10=single(j10);
k10=image30(1:14,1:14);
k10=single(k10);
l10=image30(1:14,15:28);
l10=single(l10);
m10=image30(1:14,29:42);
m10=single(m10);
n10=image30(1:14,43:56);
n10=single(n10);
o10=image30(1:14,57:70);
o10=single(o10);
p10=image40(1:14,1:14);
p10=single(p10);
q10=image40(1:14,15:28);
q10=single(q10);
r10=image40(1:14,29:42);
r10=single(r10);
s10=image40(1:14,43:56);
s10=single(s10);

a10=reshape(a10,1,196);
b10=reshape(b10,1,196);
c10=reshape(c10,1,196);
d10=reshape(d10,1,196);
e10=reshape(e10,1,196);
f10=reshape(f10,1,196);
g10=reshape(g10,1,196);
h10=reshape(h10,1,196);
i10=reshape(i10,1,196);
j10=reshape(j10,1,196);
k10=reshape(k10,1,196);
l10=reshape(l10,1,196);
m10=reshape(m10,1,196);
n10=reshape(n10,1,196);
o10=reshape(o10,1,196);
p10=reshape(p10,1,196);
q10=reshape(q10,1,196);
r10=reshape(r10,1,196);
s10=reshape(s10,1,196);

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t10=image40(1:14,57:70); t10=reshape(t10,1,196); x(56,1:196)=d3;
t10=single(t10); u10=image50(1:14,1:14); u10=reshape(u10,1,196); x(57,1:196)=e3;
u10=single(u10); v10=image50(1:14,15:28); v10=reshape(v10,1,196); x(58,1:196)=f3;
v10=single(v10); w10=image50(1:14,29:42); w10=reshape(w10,1,196); x(59,1:196)=g3;
w10=single(w10); x10=image50(1:14,43:56); x10=reshape(x10,1,196); x(60,1:196)=h3;
x10=single(x10); y10=image50(1:14,57:70); y10=reshape(y10,1,196); x(61,1:196)=i3;
y10=single(y10); z10=image60(1:14,1:14); z10=reshape(z10,1,196); x(62,1:196)=j3;
z10=single(z10); x(63,1:196)=k3; x(64,1:196)=l3; x(65,1:196)=m3;
x(66,1:196)=n3; x(67,1:196)=o3; x(68,1:196)=p3; x(69,1:196)=q3;
x(70,1:196)=r3; x(71,1:196)=s3; x(72,1:196)=t3; x(73,1:196)=u3;
x(74,1:196)=v3; x(75,1:196)=w3; x(76,1:196)=x3; x(77,1:196)=y3;
x(78,1:196)=z3; x(79,1:196)=a4; x(80,1:196)=b4; x(81,1:196)=c4;
x(82,1:196)=d4; x(83,1:196)=e4; x(84,1:196)=f4; x(85,1:196)=g4;
x(86,1:196)=h4; x(87,1:196)=i4; x(88,1:196)=j4; x(89,1:196)=k4;
x(90,1:196)=l4; x(91,1:196)=m4; x(92,1:196)=n4; x(93,1:196)=o4;
x(94,1:196)=p4; x(95,1:196)=q4; x(96,1:196)=r4; x(97,1:196)=s4;
x(98,1:196)=t4; x(99,1:196)=u4; x(100,1:196)=v4; x(101,1:196)=w4;
x(102,1:196)=x4; x(103,1:196)=y4; x(104,1:196)=z4; x(105,1:196)=a5;
x(106,1:196)=b5; x(107,1:196)=c5; x(108,1:196)=d5; x(109,1:196)=e5;
x(110,1:196)=f5; x(111,1:196)=g5; x(112,1:196)=h5; x(113,1:196)=i5;
x(114,1:196)=j5; x(115,1:196)=k5; x(116,1:196)=l5; x(117,1:196)=m5;
x(118,1:196)=n5; x(119,1:196)=o5; x(120,1:196)=p5; x(121,1:196)=q5;
x(122,1:196)=r5; x(123,1:196)=s5; x(124,1:196)=t5;
x(53,1:196)=a3; x(54,1:196)=b3; x(55,1:196)=c3;

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x(125,1:196)=u5; x(193,1:196)=k8;
x(126,1:196)=v5; x(194,1:196)=l8;
x(127,1:196)=w5; x(195,1:196)=m8;
x(128,1:196)=x5; x(196,1:196)=n8;
x(129,1:196)=y5; x(197,1:196)=o8;
x(130,1:196)=z5; x(198,1:196)=p8;
x(199,1:196)=q8;
x(131,1:196)=a6; x(200,1:196)=r8;
x(132,1:196)=b6; x(201,1:196)=s8;
x(133,1:196)=c6; x(201,1:196)=t8;
x(134,1:196)=d6; x(203,1:196)=u8;
x(135,1:196)=e6; x(204,1:196)=v8;
x(136,1:196)=f6; x(205,1:196)=w8;
x(137,1:196)=g6; x(206,1:196)=x8;
x(138,1:196)=h6; x(207,1:196)=y8;
x(139,1:196)=i6; x(208,1:196)=z8;
x(140,1:196)=j6;
x(141,1:196)=k6; x(209,1:196)=a9;
x(142,1:196)=l6; x(210,1:196)=b9;
x(143,1:196)=m6; x(211,1:196)=c9;
x(144,1:196)=n6; x(212,1:196)=d9;
x(145,1:196)=o6; x(213,1:196)=e9;
x(146,1:196)=p6; x(214,1:196)=f9;
x(147,1:196)=q6; x(215,1:196)=g9;
x(148,1:196)=r6; x(216,1:196)=h9;
x(149,1:196)=s6; x(217,1:196)=i9;
x(150,1:196)=t6; x(218,1:196)=j9;
x(151,1:196)=u6; x(219,1:196)=k9;
x(152,1:196)=v6; x(220,1:196)=l9;
x(153,1:196)=w6; x(221,1:196)=m9;
x(154,1:196)=x6; x(222,1:196)=n9;
x(155,1:196)=y6; x(223,1:196)=o9;
x(156,1:196)=z6; x(224,1:196)=p9;
x(225,1:196)=q9;
x(157,1:196)=a7; x(226,1:196)=r9;
x(158,1:196)=b7; x(227,1:196)=s9;
x(159,1:196)=c7; x(228,1:196)=t9;
x(160,1:196)=d7; x(229,1:196)=u9;
x(161,1:196)=e7; x(230,1:196)=v9;
x(162,1:196)=f7; x(231,1:196)=w9;
x(163,1:196)=g7; x(232,1:196)=x9;
x(164,1:196)=h7; x(233,1:196)=y9;
x(165,1:196)=i7; x(234,1:196)=z9;
x(166,1:196)=j7;
x(167,1:196)=k7; x(235,1:196)=a10;
x(168,1:196)=l7; x(236,1:196)=b10;
x(169,1:196)=m7; x(237,1:196)=c10;
x(170,1:196)=n7; x(238,1:196)=d10;
x(171,1:196)=o7; x(239,1:196)=e10;
x(172,1:196)=p7; x(240,1:196)=f10;
x(173,1:196)=q7; x(241,1:196)=g10;
x(174,1:196)=r7; x(242,1:196)=h10;
x(175,1:196)=s7; x(243,1:196)=i10;
x(176,1:196)=t7; x(244,1:196)=j10;
x(177,1:196)=u7; x(245,1:196)=k10;
x(178,1:196)=v7; x(246,1:196)=l10;
x(179,1:196)=w7; x(247,1:196)=m10;
x(180,1:196)=x7; x(248,1:196)=n10;
x(181,1:196)=y7; x(249,1:196)=o10;
x(182,1:196)=z7; x(250,1:196)=p10;
x(251,1:196)=q10;
x(183,1:196)=a8; x(252,1:196)=r10;
x(184,1:196)=b8; x(253,1:196)=s10;
x(185,1:196)=c8; x(254,1:196)=t10;
x(186,1:196)=d8; x(255,1:196)=u10;
x(187,1:196)=e8; x(256,1:196)=v10;
x(188,1:196)=f8; x(257,1:196)=w10;
x(189,1:196)=g8; x(258,1:196)=x10;
x(190,1:196)=h8; x(259,1:196)=y10;
x(191,1:196)=i8; x(260,1:196)=z10;
x(192,1:196)=j8;

```

```

%Proses Bipolar
for k=1:260
    for i=1:196
        if x(k,i)>0
            x(k,i)=1;
        else x(k,i)=-1;
        end
    end
end

a1=x(1,1:196);
b1=x(2,1:196);
c1=x(3,1:196);
d1=x(4,1:196);
e1=x(5,1:196);
f1=x(6,1:196);
g1=x(7,1:196);
h1=x(8,1:196);
i1=x(9,1:196);
j1=x(10,1:196);
k1=x(11,1:196);
l1=x(12,1:196);
m1=x(13,1:196);
n1=x(14,1:196);
o1=x(15,1:196);
p1=x(16,1:196);
q1=x(17,1:196);
r1=x(18,1:196);
s1=x(19,1:196);
t1=x(20,1:196);
u1=x(21,1:196);
v1=x(22,1:196);
w1=x(23,1:196);
x1=x(24,1:196);
y1=x(25,1:196);
z1=x(26,1:196);

proyek=guidata(gcbo);
pilihchar=get(proyek.popup2,'value');
switch pilihchar
    case 1
        pilih=get(proyek.popup1,'value');
        switch pilih
            case 1
                %Perhitungan Bobot
                w= c1'* c1 + l1'* l1 + o1'* o1 + c1'* c1 + k1'* k1 ;
                %Diagonal matriks dinolkan
                for k=1:196
                    for l=1:196
                        if k==l
                            w(k,l)=0;
                        end
                    end
                end

                proyek=guidata(gcbo);
                input=get(proyek.gbr,'userdata');

                input1=input(1:14,1:14);
                input1=reshape(input1,1,196); input1=single(input1);
                input2=input(1:14,15:28);
                input2=reshape(input2,1,196); input2=single(input2);
                input3=input(1:14,29:42);
                input3=reshape(input3,1,196); input3=single(input3);
                input4=input(1:14,43:56);
                input4=reshape(input4,1,196); input4=single(input4);
                input5=input(1:14,57:70);
                input5=reshape(input5,1,196); input5=single(input5);

                S=input1*w;
                for p=1:196
                    if S(p)< 0
                        S(p)=0;
                    else
                        S(p)=1;
                    end
                end

                %Proses iterasi
                for j=1:1000
                    T=S*w;
                    for p=1:196
                        if T(p)< 0
                            T(p)=0;
                        else
                            T(p)=1;
                        end
                    end

                    beda=0;
                    for i=1:196
                        beda=beda+(S(i)-T(i));
                    end

                    if beda>0
                        S=T;
                    else
                        j=1000;
                    end
                end

                %Perbandingan bit-bit biner
                for k=1:260
                    er=0;
                    for i=1:196
                        er=er+(x(k,i)-T(i))^2;
                    end
                    er=er/196;
                    s(k)=er;
                end

                kc1=s(1);
                yk1=1;
                for k=2:260
                    if(kc1>s(k))
                        kc1=s(k);
                        yk1=k;
                    end
                end
            end
        end
    end
end

```

```

T(p)=0;
else
    T(p)=1;
end
beda=0;
for i=1:196
    beda=beda+(S(i)-T(i));
end
if beda>0
    S=T;
else
    j=1000;
end
end
%Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-S(i))^2;
    end
    er=er/196;
    s(k)=er;
end
kc3=s(1);
yk3=1;
for k=2:260
    if(kc3>s(k))
        kc3=s(k);
        yk3=k;
    end
end
if yk3 <= 26
    huruf3=char(yk3+64);
else
    yk3=mod(yk3,26);
    huruf3=char(64+yk3);
end
S=input4*w;
for p=1:196
    if S(p)< 0
        S(p)=0;
    else
        S(p)=1;
    end
end
%Proses iterasi
for j=1:1000
    T=S*w;
    for p=1:196
        if T(p)< 0
            T(p)=0;
        else
            T(p)=1;
        end
    end
    beda=0;
    for i=1:196
        beda=beda+(S(i)-T(i));
    end
    if beda>0
        S=T;
    else
        j=1000;
    end
end
%Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-S(i))^2;
    end
    er=er/196;
    s(k)=er;
end
kc4=s(1);

```

```

yk4=1;
for k=2:260
    if(kc4>s(k))
        kc4=s(k);
        yk4=k;
    end
end

if yk4 <= 26
    huruf4=char(yk4+64);
else
    yk4=mod(yk4,26);
    huruf4=char(64+yk4);
end

S=input5*w;
for p=1:196
    if S(p)< 0
        S(p)=0;
    else
        S(p)=1;
    end
end

%Proses iterasi
for j=1:1000
    T=S*w;
    for p=1:196
        if T(p)< 0
            T(p)=0;
        else
            T(p)=1;
        end
    end

    beda=0;
    for i=1:196
        beda=beda+(S(i)-T(i));
    end
    if beda>0
        S=T;
    else
        j=1000;
    end
end

%Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-S(i))^2;
    end
    er=er/196;
    s(k)=er;
end

kc5=s(1);
yk5=1;
for k=2:260
    if(kc5>s(k))
        kc5=s(k);
        yk5=k;
    end
end

if yk5 <= 26
    huruf5=char(yk5+64);
else
    yk5=mod(yk5,26);
    huruf5=char(64+yk5);
end

end

set(proyek.edit1,'string',char([huruf1    huruf2    huruf3
huruf4 huruf5]));
set(proyek.edit1,'userdata',char([huruf1    huruf2    huruf3
huruf4 huruf5]));

case 2
    %Perhitungan Bobot
    w= e1'* e1 + m1'* m1 + p1'* p1 + t1'* t1 + y1'* y1 ;
    %Diagonal matriks dinolkan
    for k=1:196
        for l=1:196
            if k==l
                w(k,l)=0;
            end
        end
    end

    proyek=guidata(gcbo);
    input=get(proyek,gbr,'userdata');

    input1=input(1:14,1:14);
    input1=reshape(input1,1,196);  input1=single(input1);
    input2=input(1:14,15:28);
    input2=reshape(input2,1,196);  input2=single(input2);
    input3=input(1:14,29:42);
    input3=reshape(input3,1,196);  input3=single(input3);
    input4=input(1:14,43:56);
    input4=reshape(input4,1,196);  input4=single(input4);
    input5=input(1:14,57:70);
    input5=reshape(input5,1,196);  input5=single(input5);

    S=input1*w;
    for p=1:196
        if S(p)< 0
            S(p)=0;
        else
            S(p)=1;
        end
    end

    %Proses iterasi
    for j=1:1000
        T=S*w;
        for p=1:196
            if T(p)< 0
                T(p)=0;
            else
                T(p)=1;
            end
        end

        beda=0;
        for i=1:196
            beda=beda+(S(i)-T(i));
        end
        if beda>0
            S=T;
        else
            j=1000;
        end
    end

    %Perbandingan bit-bit biner
    for k=1:260
        er=0;
        for i=1:196
            er=er+(x(k,i)-S(i))^2;
        end
        er=er/196;
        s(k)=er;
    end

```

```

        er=er+(x(k,i)-T(i))^2;
    end
    er=er/196;
    s(k)=er;
end
kc1=s(1);
yk1=1;
for k=2:260
    if(kc1>s(k))
        kc1=s(k);
        yk1=k;
    end
end
if yk1 <= 26
    huruf1=char(yk1+64);
else
    yk1=mod(yk1,26);
    huruf1=char(64+yk1);
end

S=input2*w;
for p=1:196
    if S(p)< 0
        S(p)=0;
    else
        S(p)=1;
    end
end

%Proses Iterasi
for j=1:1000
    T=S*w;
    for p=1:196
        if T(p)< 0
            T(p)=0;
        else
            T(p)=1;
        end
    end
    beda=0;
    for i=1:196
        beda=beda+(S(i)-T(i));
    end
    if beda>0
        S=T;
    else
        j=1000;
    end
end

%Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-S(i))^2;
    end
    er=er/196;
    s(k)=er;
end
kc3=s(1);
yk3=1;
for k=2:260
    if(kc3>s(k))
        kc3=s(k);
        yk3=k;
    end
end
if yk3 <= 26
    huruf3=char(yk3+64);
else
    yk3=mod(yk3,26);
    huruf3=char(64+yk3);
end

S=input3*w;
for p=1:196
    if S(p)< 0
        S(p)=0;
    else
        S(p)=1;
    end
end

%Proses iterasi
for j=1:1000
    T=S*w;
    for p=1:196
        if T(p)< 0
            T(p)=0;
        else
            T(p)=1;
        end
    end
    beda=0;
    for i=1:196
        beda=beda+(S(i)-T(i));
    end
    if beda>0
        S=T;
    else
        j=1000;
    end
end

%Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-S(i))^2;
    end
    er=er/196;
    s(k)=er;
end
kc3=s(1);
yk3=1;
for k=2:260
    if(kc3>s(k))
        kc3=s(k);
        yk3=k;
    end
end
if yk3 <= 26
    huruf2=char(yk3+64);
else
    yk3=mod(yk3,26);
    huruf2=char(64+yk3);
end

S=input4*w;
for p=1:196
    if S(p)< 0
        S(p)=0;
    else

```

```

S(p)=1;
end
end

%Proses iterasi
for j=1:1000
    T=S*w;
    for p=1:196
        if T(p)< 0
            T(p)=0;
        else
            T(p)=1;
        end
    end
    beda=0;
    for i=1:196
        beda=beda+(S(i)-T(i));
    end
    if beda>0
        S=T;
    else
        j=1000;
    end
end

%Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-S(i))^2;
    end
    er=er/196;
    s(k)=er;
end
kc5=s(1);
yk5=1;
for k=2:260
    if(kc5>s(k))
        kc5=s(k);
        yk5=k;
    end
end

if yk5 <= 26
    huruf5=char(yk5+64);
else
    yk5=mod(yk5,26);
    huruf5=char(64+yk5);
end

set(proyek.edit1,'string',char([huruf1    huruf2    huruf3
huruf4 huruf5]));
set(proyek.edit1,'userdata',char([huruf1    huruf2    huruf3
huruf4 huruf5]));

if yk4 <= 26
    huruf4=char(yk4+64);
else
    yk4=mod(yk4,26);
    huruf4=char(64+yk4);
end

case 3
    %Perhitungan Bobot
    w= f1'* f1 + o1'* o1 + r1'* r1 + e1'* e1 + x1'* x1 ;

%Diagonal matriks dinolkan
for k=1:196
    for l=1:196
        if k==l
            w(k,l)=0;
        end
    end
end

proyek=guidata(gcbo);
input=get(proyek,gbr,'userdata');

input1=input(1:14,1:14);
input1=reshape(input1,1,196); input1=single(input1);
input2=input(1:14,15:28);
input2=reshape(input2,1,196); input2=single(input2);
input3=input(1:14,29:42);
input3=reshape(input3,1,196); input3=single(input3);
input4=input(1:14,43:56);
input4=reshape(input4,1,196); input4=single(input4);

```

```

input5=input(1:14,57:70);
input5=reshape(input5,1,196); input5=single(input5);

S=input1*w;
for p=1:196
    if S(p)< 0
        S(p)=0;
    else
        S(p)=1;
    end
end

%Proses iterasi
for j=1:1000
    T=S*w;
    for p=1:196
        if T(p)< 0
            T(p)=0;
        else
            T(p)=1;
        end
    end

    beda=0;
    for i=1:196
        beda=beda+(S(i)-T(i));
    end
    if beda>0
        S=T;
    else
        j=1000;
    end
end

%Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-S(i))^2;
    end
    er=er/196;
    s(k)=er;
end
kc2=s(1);
yk2=1;
for k=2:260
    if(kc2>s(k))
        kc2=s(k);
        yk2=k;
    end
end

%Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-T(i))^2;
    end
    er=er/196;
    s(k)=er;
end
kc1=s(1);
yk1=1;
for k=2:260
    if(kc1>s(k))
        kc1=s(k);
        yk1=k;
    end
end

if yk1 <= 26
    huruf1=char(yk1+64);
else
    yk1=mod(yk1,26);
    huruf1=char(64+yk1);
end

S=input3*w;
for p=1:196
    if S(p)< 0
        S(p)=0;
    else
        S(p)=1;
    end
end

%Proses iterasi
for j=1:1000
    T=S*w;
    for p=1:196
        if T(p)< 0
            T(p)=0;
        else
            T(p)=1;
        end
    end

    beda=0;
    for i=1:196
        beda=beda+(S(i)-T(i));
    end
    if beda>0

```

```

S=T;
else
    j=1000;
end
end

% Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-S(i))^2;
    end
    er=er/196;
    s(k)=er;
end

kc3=s(1);
yk3=1;
for k=2:260
    if(kc3>s(k))
        kc3=s(k);
        yk3=k;
    end
end

if yk3 <= 26
    huruf3=char(yk3+64);
else
    yk3=mod(yk3,26);
    huruf3=char(64+yk3);
end

S=input5*w;
for p=1:196
    if S(p)< 0
        S(p)=0;
    else
        S(p)=1;
    end
end

%Proses iterasi
for j=1:1000
    T=S*w;
    for p=1:196
        if T(p)< 0
            T(p)=0;
        else
            T(p)=1;
        end
    end

    beda=0;
    for i=1:196
        beda=beda+(S(i)-T(i));
    end
    if beda>0
        S=T;
    else
        j=1000;
    end
end

%Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-S(i))^2;
    end
    er=er/196;
    s(k)=er;
end

kc5=s(1);
yk5=1;
for k=2:260
    if(kc5>s(k))
        kc5=s(k);
        yk5=k;
    end
end

if yk5 <= 26
    huruf5=char(yk5+64);

```

```

else
    yk5=mod(yk5,26);
    huruf5=char(64+yk5);
end

set(proyek.edit1,'string'.char([huruf1     huruf2
huruf3 huruf4 huruf5]));
set(proyek.edit1,'userdata'.char([huruf1     huruf2
huruf3 huruf4 huruf5]));

case 4
    %Perhitungan Bobot
w= j1'* j1 + e1'* e1 + s1'* s1 + u1'* u1 + s1'* s1 ;

%Diagonal matriks dinolkan
for k=1:196
    for l=1:196
        if k==l
            w(k,l)=0;
        end
    end
end

proyek=guidata(gcbo);
input=get(proyek.gbr,'userdata');

input1=input(1:14,1:14);
input1=reshape(input1,1,196); input1=single(input1);
input2=input(1:14,15:28);
input2=reshape(input2,1,196); input2=single(input2);
input3=input(1:14,29:42);
input3=reshape(input3,1,196); input3=single(input3);
input4=input(1:14,43:56);
input4=reshape(input4,1,196); input4=single(input4);
input5=input(1:14,57:70);
input5=reshape(input5,1,196); input5=single(input5);

S=input1*w;
for p=1:196
    if S(p)< 0
        S(p)=0;
    else
        S(p)=1;
    end
end

%Proses iterasi
for j=1:1000
    T=S*w;
    for p=1:196
        if T(p)< 0
            T(p)=0;
        else
            T(p)=1;
        end
    end

    beda=0;
    for i=1:196
        beda=beda+(S(i)-T(i));
    end
    if beda>0
        S=T;
    else
        j=1000;
    end
end

%Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-T(i))^2;
    end
    er=er/196;
    s(k)=er;
end

kc1=s(1);
yk1=1;
for k=2:260
    if(kc1>s(k))
        kc1=s(k);
        yk1=k;
    end
end

if yk1 <= 26
    huruf1=char(yk1+64);
else
    yk1=mod(yk1,26);
    huruf1=char(64+yk1);
end

S=input2*w;
for p=1:196
    if S(p)< 0
        S(p)=0;
    else
        S(p)=1;
    end
end

%Proses Iterasi
for j=1:1000
    T=S*w;
    for p=1:196
        if T(p)< 0
            T(p)=0;
        else
            T(p)=1;
        end
    end

    beda=0;
    for i=1:196
        beda=beda+(S(i)-T(i));
    end
    if beda>0
        S=T;
    else
        j=1000;
    end
end

%Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-S(i))^2;
    end
    er=er/196;
    s(k)=er;
end

kc2=s(1);
yk2=1;
for k=2:260
    if(kc2>s(k))
        kc2=s(k);
        yk2=k;
    end
end

```

```

        end
    end

    if yk2 <= 26
        huruf2=char(yk2+64);
    else
        yk2=mod(yk2,26);
        huruf2=char(64+yk2);
    end

    S=input3*w;
    for p=1:196
        if S(p)< 0
            S(p)=0;
        else
            S(p)=1;
        end
    end

    %Proses iterasi
    for j=1:1000
        T=S*w;
        for p=1:196
            if T(p)< 0
                T(p)=0;
            else
                T(p)=1;
            end
        end

        beda=0;
        for i=1:196
            beda=beda+(S(i)-T(i));
        end
        if beda>0
            S=T;
        else
            j=1000;
        end
    end

    %Perbandingan bit-bit biner
    for k=1:260
        er=0;
        for i=1:196
            er=er+(x(k,i)-S(i))^2;
        end
        er=er/196;
        s(k)=er;
    end
    kc4=s(1);
    yk4=1;
    for k=2:260
        if(kc4>s(k))
            kc4=s(k);
            yk4=k;
        end
    end

    if yk4 <= 26
        huruf4=char(yk4+64);
    else
        yk4=mod(yk4,26);
        huruf4=char(64+yk4);
    end

    S=input5*w;
    for p=1:196
        if S(p)< 0
            S(p)=0;
        else
            S(p)=1;
        end
    end

    %Proses iterasi
    for j=1:1000
        T=S*w;
        for p=1:196
            if T(p)< 0
                T(p)=0;

```

```

        else
            T(p)=1;
        end
    end

    beda=0;
    for i=1:196
        beda=beda+(S(i)-T(i));
    end
    if beda>0
        S=T;
    else
        j=1000;
    end
end

%Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-S(i))^2;
    end
    er=er/196;
    s(k)=er;
end
kc5=s(1);
yk5=1;
for k=2:260
    if(kc5>s(k))
        kc5=s(k);
        yk5=k;
    end
end

if yk5 <= 26
    huruf5=char(yk5+64);
else
    yk5=mod(yk5,26);
    huruf5=char(64+yk5);
end

set(proyek.edit1,'string',char([huruf1    huruf2    huruf3
huruf4 huruf5]));
set(proyek.edit1,'userdata',char([huruf1    huruf2    huruf3
huruf4 huruf5]));

case 5
    %Perhitungan Bobot
    w= 11'* l1 + o1'* o1 + v1'* v1 + e1'* e1 + s1'* s1 ;

    %Diagonal matriks dinolkan
    for k=1:196
        for l=1:196;
            if k==l
                w(k,l)=0;
            end
        end
    end

    proyek=guidata(gcbo);
    input=get(proyek.gbr,'userdata');

    input1=input(1:14,1:14);
    input1=reshape(input1,1,196);  input1=single(input1);
    input2=input(1:14,15:28);
    input2=reshape(input2,1,196);  input2=single(input2);
    input3=input(1:14,29:42);
    input3=reshape(input3,1,196);  input3=single(input3);

    input4=input(1:14,43:56);
    input4=reshape(input4,1,196);  input4=single(input4);
    input5=input(1:14,57:70);
    input5=reshape(input5,1,196);  input5=single(input5);

    S=input1*w;
    for p=1:196
        if S(p)< 0
            S(p)=0;
        else
            S(p)=1;
        end
    end

    %Proses iterasi
    for j=1:1000
        T=S*w;
        for p=1:196
            if T(p)< 0
                T(p)=0;
            else
                T(p)=1;
            end
        end

        beda=0;
        for i=1:196
            beda=beda+(S(i)-T(i));
        end
        if beda>0
            S=T;
        else
            j=1000;
        end
    end

    %Perbandingan bit-bit biner
    for k=1:260
        er=0;
        for i=1:196
            er=er+(x(k,i)-T(i))^2;
        end
        er=er/196;
        s(k)=er;
    end
    kc1=s(1);
    yk1=1;
    for k=2:260
        if(kc1>s(k))
            kc1=s(k);
            yk1=k;
        end
    end

    if yk1 <= 26
        huruf1=char(yk1+64);
    else
        yk1=mod(yk1,26);
        huruf1=char(64+yk1);
    end

    S=input2*w;
    for p=1:196
        if S(p)< 0
            S(p)=0;
        else
            S(p)=1;
        end
    end

```

```

%Proses Iterasi
for j=1:1000
    T=S*w;
    for p=1:196
        if T(p)< 0
            T(p)=0;
        else
            T(p)=1;
        end
    end

    beda=0;
    for i=1:196
        beda=beda+(S(i)-T(i));
    end
    if beda>0
        S=T;
    else
        j=1000;
    end
end

%Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-S(i))^2;
    end
    er=er/196;
    s(k)=er;
end
kc3=s(1);
yk3=1;
for k=2:260
    if(kc3>s(k))
        kc3=s(k);
        yk3=k;
    end
end
if yk3 <= 26
    huruf3=char(yk3+64);
else
    yk3=mod(yk3,26);
    huruf3=char(64+yk3);
end

kc2=s(1);
yk2=1;
for k=2:260
    if(kc2>s(k))
        kc2=s(k);
        yk2=k;
    end
end
if yk2 <= 26
    huruf2=char(yk2+64);
else
    yk2=mod(yk2,26);
    huruf2=char(64+yk2);
end

%Proses iterasi
for j=1:1000
    T=S*w;
    for p=1:196
        if T(p)< 0
            T(p)=0;
        else
            T(p)=1;
        end
    end

    beda=0;
    for i=1:196
        beda=beda+(S(i)-T(i));
    end
    if beda>0
        S=T;
    else
        j=1000;
    end
end

%Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-S(i))^2;
    end

```

```

        end
        er=er/196;
        s(k)=er;
    end
    kc4=s(1);
    yk4=1;
    for k=2:260
        if(kc4>s(k))
            kc4=s(k);
            yk4=k;
        end
    end

    if yk4 <= 26
        huruf5=char(yk5+64);
    else
        yk5=mod(yk5,26);
        huruf5=char(64+yk5);
    end

    set(proyek.edit1,'string',char([huruf1    huruf2    huruf3
huruf4 huruf5]));
    set(proyek.edit1,'userdata',char([huruf1    huruf2    huruf3
huruf4 huruf5]));

case 6
%Perhitungan Bobot
w= n1'* n1 + o1'* o1 + k1'* k1 + i1'* i1 + a1'* a1 ;

%Diagonal matriks dinolkan
for k=1:196
    for l=1:196
        if k==l
            w(k,l)=0;
        end
    end
end

proyek=guidata(gcbo);
input=get(proyek.gbr,'userdata');

input1=input(1:14,1:14);
input1=reshape(input1,1,196); input1=single(input1);
input2=input(1:14,15:28);
input2=reshape(input2,1,196); input2=single(input2);
input3=input(1:14,29:42);
input3=reshape(input3,1,196); input3=single(input3);
input4=input(1:14,43:56);
input4=reshape(input4,1,196); input4=single(input4);
input5=input(1:14,57:70);
input5=reshape(input5,1,196); input5=single(input5);

S=input1*w;
for p=1:196
    if S(p)< 0
        S(p)=0;
    else
        S(p)=1;
    end
end

%Proses iterasi
for j=1:1000
    T=S*w;
    for p=1:196
        if T(p)< 0
            T(p)=0;
        else
            T(p)=1;
        end
    end

    beda=0;
    for i=1:196
        beda=beda+(S(i)-T(i));
    end
    if beda>0
        S=T;
    else
        j=1000;
    end
end

%Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-S(i))^2;
    end
    er=er/196;
    s(k)=er;
end

kc5=s(1);
yk5=1;
for k=2:260
    if(kc5>s(k))
        kc5=s(k);
        yk5=k;
    end
end

beda=0;
for i=1:196
    beda=beda+(S(i)-T(i));
end
if beda>0
    S=T;
else
    j=1000;
end

```

```

%Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-T(i))^2;
    end
    er=er/196;
    s(k)=er;
end
kc1=s(1);
yk1=1;
for k=2:260
    if(kc1>s(k))
        kc1=s(k);
        yk1=k;
    end
end
if yk1 <= 26
    huruf1=char(yk1+64);
else
    yk1=mod(yk1,26);
    huruf1=char(64+yk1);
end
S=input3*w;
for p=1:196
    if S(p)< 0
        S(p)=0;
    else
        S(p)=1;
    end
end
%Proses iterasi
for j=1:1000
    T=S*w;
    for p=1:196
        if T(p)< 0
            T(p)=0;
        else
            T(p)=1;
        end
    end
    beda=0;
    for i=1:196
        beda=beda+(S(i)-T(i));
    end
    if beda>0
        S=T;
    else
        j=1000;
    end
end
%Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-S(i))^2;
    end
    er=er/196;
    s(k)=er;
end
kc3=s(1);
yk3=1;
for k=2:260
    if(kc3>s(k))
        kc3=s(k);
        yk3=k;
    end
end
if yk3 <= 26
    huruf3=char(yk3+64);
else
    yk3=mod(yk3,26);
    huruf3=char(64+yk3);
end

```

```

S=input4*w;
for p=1:196
    if S(p)< 0
        S(p)=0;
    else
        S(p)=1;
    end
end

%Proses iterasi
for j=1:1000
    T=S*w;
    for p=1:196
        if T(p)< 0
            T(p)=0;
        else
            T(p)=1;
        end
    end

    beda=0;
    for i=1:196
        beda=beda+(S(i)-T(i));
    end
    if beda>0
        S=T;
    else
        j=1000;
    end
end

%Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-S(i))^2;
    end
    er=er/196;
    s(k)=er;
end
if beda>0
    S=T;
else
    j=1000;
end

%Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-S(i))^2;
    end
    er=er/196;
    s(k)=er;
end
kc4=s(1);
yk4=1;
for k=2:260
    if(kc4>s(k))
        kc4=s(k);
        yk4=k;
    end
end
if yk4 <= 26
    huruf4=char(yk4+64);
else
    yk4=mod(yk4,26);
    huruf4=char(64+yk4);
end

set(proyek.edit1,'string',char([huruf1    huruf2    huruf3
huruf4 huruf5]));
set(proyek.edit1,'userdata',char([huruf1    huruf2    huruf3
huruf4 huruf5]));

if yk4 <= 26
    case 7
        %Perhitungan Bobot
        w= q1'* q1 + u1'* u1 + e1'* e1 + e1'* e1 + n1'* n1 ;
        %Diagonal matriks dinolkan
        for k=1:196
            for l=1:196
                if k==l
                    w(k,l)=0;
                end
            end
        end
        proyek=guidata(gcbo);
        input=get(proyek.gbr,'userdata');

        input1=input(1:14,1:14);
        input1=reshape(input1,1,196);  input1=single(input1);
        input2=input(1:14,15:28);
        input2=reshape(input2,1,196);  input2=single(input2);

S=input5*w;
for p=1:196
    if S(p)< 0
        S(p)=0;
    else
        S(p)=1;
    end
end

%Proses iterasi
for j=1:1000
    T=S*w;
    for p=1:196
        if T(p)< 0
            T(p)=0;
        else
            T(p)=1;
        end
    end

    beda=0;
    for i=1:196
        beda=beda+(S(i)-T(i));
    end
    if beda>0
        S=T;
    else
        j=1000;
    end
end

%Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-S(i))^2;
    end
    er=er/196;
    s(k)=er;
end
kc5=s(1);
yk5=1;
for k=2:260
    if(kc5>s(k))
        kc5=s(k);
        yk5=k;
    end
end
if yk5 <= 26
    huruf5=char(yk5+64);
else
    yk5=mod(yk5,26);
    huruf5=char(64+yk5);
end

set(proyek.edit1,'string',char([huruf1    huruf2    huruf3
huruf4 huruf5]));
set(proyek.edit1,'userdata',char([huruf1    huruf2    huruf3
huruf4 huruf5]));

```

```

input3=input(1:14,29:42);
input3=reshape(input3,1,196); input3=single(input3);
input4=input(1:14,43:56);
input4=reshape(input4,1,196); input4=single(input4);
input5=input(1:14,57:70);
input5=reshape(input5,1,196); input5=single(input5);

S=input1*w;
for p=1:196
    if S(p)< 0
        S(p)=0;
    else
        S(p)=1;
    end
end

%Proses iterasi
for j=1:1000
    T=S*w;
    for p=1:196
        if T(p)< 0
            T(p)=0;
        else
            T(p)=1;
        end
    end

    beda=0;
    for i=1:196
        beda=beda+(S(i)-T(i));
    end
    if beda>0
        S=T;
    else
        j=1000;
    end
end

%Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-S(i))^2;
    end
    er=er/196;
    s(k)=er;
end
kc2=s(1);
yk2=1;
for k=2:260
    if(kc2>s(k))
        kc2=s(k);
        yk2=k;
    end
end

if yk2 <= 26
    huruf2=char(yk2+64);
else
    yk2=mod(yk2,26);
    huruf2=char(64+yk2);
end

S=input3*w;
for p=1:196
    if S(p)< 0
        S(p)=0;
    else
        S(p)=1;
    end
end

%Proses iterasi
for j=1:1000
    T=S*w;
    for p=1:196
        if T(p)< 0
            T(p)=0;
        else
            T(p)=1;
        end
    end

    beda=0;
    for i=1:196
        beda=beda+(S(i)-T(i));
    end
    if beda>0
        S=T;
    else
        j=1000;
    end
end

%Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-T(i))^2;
    end
    er=er/196;
    s(k)=er;
end
kc1=s(1);
yk1=1;
for k=2:260
    if(kc1>s(k))
        kc1=s(k);
        yk1=k;
    end
end

if yk1 <= 26
    huruf1=char(yk1+64);
else
    yk1=mod(yk1,26);
    huruf1=char(64+yk1);
end

S=input2*w;
for p=1:196
    if S(p)< 0
        S(p)=0;
    else
        S(p)=1;
    end
end

```

```

for i=1:196
    beda=beda+(S(i)-T(i));
end
if beda>0
    S=T;
else
    j=1000;
end
end

% Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-S(i))^2;
    end
    er=er/196;
    s(k)=er;
end

kc3=s(1);
yk3=1;
for k=2:260
    if(kc3>s(k))
        kc3=s(k);
        yk3=k;
    end
end

if yk3 <= 26
    huruf3=char(yk3+64);
else
    yk3=mod(yk3,26);
    huruf3=char(64+yk3);
end

S=input5*w;
for p=1:196
    if S(p)< 0
        S(p)=0;
    else
        S(p)=1;
    end
end

% Proses iterasi
for j=1:1000
    T=S*w;
    for p=1:196
        if T(p)< 0
            T(p)=0;
        else
            T(p)=1;
        end
    end

    beda=0;
    for i=1:196
        beda=beda+(S(i)-T(i));
    end
    if beda>0
        S=T;
    else
        j=1000;
    end
end

% Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-S(i))^2;
    end
    er=er/196;
    s(k)=er;
end

kc4=s(1);
yk4=1;
for k=2:260
    if(kc4>s(k))
        kc4=s(k);
        yk4=k;
    end
end

if yk4 <= 26
    huruf4=char(yk4+64);
else
    yk4=mod(yk4,26);
    huruf4=char(64+yk4);
end

% Proses iterasi
for j=1:1000
    T=S*w;
    for p=1:196
        if T(p)< 0
            T(p)=0;
        else
            T(p)=1;
        end
    end

    beda=0;
    for i=1:196
        beda=beda+(S(i)-T(i));
    end
    if beda>0
        S=T;
    else
        j=1000;
    end
end

% Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-S(i))^2;
    end
    er=er/196;
    s(k)=er;
end

kc5=s(1);
yk5=1;
for k=2:260
    if(kc5>s(k))
        kc5=s(k);
        yk5=k;
    end
end

```

```

    end
    end

    if yk5 <= 26
        huruf5=char(yk5+64);
    else
        yk5=mod(yk5,26);
        huruf5=char(64+yk5);
    end

    set(proyek.edit1,'string',char([huruf1  huruf2  huruf3
huruf4 huruf5]));
    set(proyek.edit1,'userdata',char([huruf1  huruf2  huruf3
huruf4 huruf5]));

    case 8
        %Perhitungan Bobot
        w= r1'* r1 + i1'* i1 + g1'* g1 + h1'* h1 + t1'* t1 ;

    %Diagonal matriks dinolkan
    for k=1:196
        for l=1:196
            if k==l
                w(k,l)=0;
            end
        end
    end

    proyek=guidata(gcbo);
    input=get(proyek.gbr,'userdata');

    input1=input(1:14,1:14);
    input1=reshape(input1,1,196);  input1=single(input1);
    input2=input(1:14,15:28);
    input2=reshape(input2,1,196);  input2=single(input2);
    input3=input(1:14,29:42);
    input3=reshape(input3,1,196);  input3=single(input3);
    input4=input(1:14,43:56);
    input4=reshape(input4,1,196);  input4=single(input4);
    input5=input(1:14,57:70);
    input5=reshape(input5,1,196);  input5=single(input5);

    S=input1*w;
    for p=1:196
        if S(p)< 0
            S(p)=0;
        else
            S(p)=1;
        end
    end

    %Proses iterasi
    for j=1:1000
        T=S*w;
        for p=1:196
            if T(p)< 0
                T(p)=0;
            else
                T(p)=1;
            end
        end

        beda=0;
        for i=1:196
            beda=beda+(S(i)-T(i));
        end
        if beda>0
            S=T;
        else
            j=1000;
        end
    end

    %Perbandingan bit-bit biner
    for k=1:260
        er=0;
        for i=1:196
            er=er+(x(k,i)-T(i))^2;
        end
        er=er/196;
        s(k)=er;
    end

    kc1=s(1);
    yk1=1;
    for k=2:260
        if(kc1>s(k))
            kc1=s(k);
            yk1=k;
        end
    end

    if yk1 <= 26
        huruf1=char(yk1+64);
    else
        yk1=mod(yk1,26);
        huruf1=char(64+yk1);
    end

    S=input2*w;
    for p=1:196
        if S(p)< 0
            S(p)=0;
        else
            S(p)=1;
        end
    end

    %Proses Iterasi
    for j=1:1000
        T=S*w;
        for p=1:196
            if T(p)< 0
                T(p)=0;
            else
                T(p)=1;
            end
        end

        beda=0;
        for i=1:196
            beda=beda+(S(i)-T(i));
        end
        if beda>0
            S=T;
        else
            j=1000;
        end
    end

    %Perbandingan bit-bit biner
    for k=1:260
        er=0;
        for i=1:196
            er=er+(x(k,i)-S(i))^2;
        end
        er=er/196;
        s(k)=er;
    end

    kc2=s(1);
    yk2=1;

```

```

for k=2:260
    if(kc2>s(k))
        kc2=s(k);
        yk2=k;
    end
end

if yk2 <= 26
    huruf2=char(yk2+64);
else
    yk2=mod(yk2,26);
    huruf2=char(64+yk2);
end

S=input4*w;
for p=1:196
    if S(p)< 0
        S(p)=0;
    else
        S(p)=1;
    end
end

%Proses iterasi
for j=1:1000
    T=S*w;
    for p=1:196
        if T(p)< 0
            T(p)=0;
        else
            T(p)=1;
        end
    end

    beda=0;
    for i=1:196
        beda=beda+(S(i)-T(i));
    end
    if beda>0
        S=T;
    else
        j=1000;
    end
end

%Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-S(i))^2;
    end
    er=er/196;
    s(k)=er;
end

if beda>0
    S=T;
else
    j=1000;
end

% Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-S(i))^2;
    end
    er=er/196;
    s(k)=er;
end

kc4=s(1);
yk4=1;
for k=2:260
    if(kc4>s(k))
        kc4=s(k);
        yk4=k;
    end
end

if yk4 <= 26
    huruf4=char(yk4+64);
else
    yk4=mod(yk4,26);
    huruf4=char(64+yk4);
end

S=input5*w;
for p=1:196
    if S(p)< 0
        S(p)=0;
    else
        S(p)=1;
    end
end

%Proses iterasi
for j=1:1000

```

```

T=S*w;
for p=1:196
    if T(p)< 0
        T(p)=0;
    else
        T(p)=1;
    end
end

beda=0;
for i=1:196
    beda=beda+(S(i)-T(i));
end
if beda>0
    S=T;
else
    j=1000;
end
end

%Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-S(i))^2;
    end
    er=er/196;
    s(k)=er;
end
kc5=s(1);
yk5=1;
for k=2:260
    if(kc5>s(k))
        kc5=s(k);
        yk5=k;
    end
end
if yk5 <= 26
    huruf5=char(yk5+64);
else
    yk5=mod(yk5,26);
    huruf5=char(64+yk5);
end

set(proyek.edit1,'string',char([huruf1  huruf2  huruf3
huruf4  huruf5]));
set(proyek.edit1,'userdata',char([huruf1  huruf2  huruf3
huruf4  huruf5]));

case 9
    %Perhitungan Bobot
    w= v1'* v1 + e1'* e1 + g1'* g1 + a1'* a1 + s1'* s1 ;

%Diagonal matriks dinolkan
for k=1:196
    for l=1:196
        if k==l
            w(k,l)=0;
        end
    end
end

proyek=guidata(gcbo);
input=get(proyek.gbr,'userdata');

input1=input(1:14,1:14);
input1=reshape(input1,1,196); input1=single(input1);

input2=input(1:14,15:28);
input2=reshape(input2,1,196); input2=single(input2);
input3=input(1:14,29:42);
input3=reshape(input3,1,196); input3=single(input3);
input4=input(1:14,43:56);
input4=reshape(input4,1,196); input4=single(input4);
input5=input(1:14,57:70);
input5=reshape(input5,1,196); input5=single(input5);

S=input1*w;
for p=1:196
    if S(p)< 0
        S(p)=0;
    else
        S(p)=1;
    end
end

%Proses iterasi
for j=1:1000
    T=S*w;
    for p=1:196
        if T(p)< 0
            T(p)=0;
        else
            T(p)=1;
        end
    end

    beda=0;
    for i=1:196
        beda=beda+(S(i)-T(i));
    end
    if beda>0
        S=T;
    else
        j=1000;
    end
end

%Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-T(i))^2;
    end
    er=er/196;
    s(k)=er;
end
kc1=s(1);
yk1=1;
for k=2:260
    if(kc1>s(k))
        kc1=s(k);
        yk1=k;
    end
end
if yk1 <= 26
    huruf1=char(yk1+64);
else
    yk1=mod(yk1,26);
    huruf1=char(64+yk1);
end

S=input2*w;
for p=1:196
    if S(p)< 0
        S(p)=0;
    else

```

```

S(p)=1;
end
end

%Proses Iterasi
for j=1:1000
T=S*w;
for p=1:196
if T(p)< 0
T(p)=0;
else
T(p)=1;
end
end

beda=0;
for i=1:196
beda=beda+(S(i)-T(i));
end
if beda>0
S=T;
else
j=1000;
end
end

%Perbandingan bit-bit biner
for k=1:260
er=0;
for i=1:196
er=er+(x(k,i)-S(i))^2;
end
er=er/196;
s(k)=er;
end
kc3=s(1);
yk3=1;
for k=2:260
if(kc3>s(k))
kc3=s(k);
yk3=k;
end
end

if yk3 <= 26
huruf3=char(yk3+64);
else
yk3=mod(yk3,26);
huruf3=char(64+yk3);
end

S=input4*w;
for p=1:196
if S(p)< 0
S(p)=0;
else
S(p)=1;
end
end

%Proses iterasi
for j=1:1000
T=S*w;
for p=1:196
if T(p)< 0
T(p)=0;
else
T(p)=1;
end
end

beda=0;
for i=1:196
beda=beda+(S(i)-T(i));
end
if beda>0
S=T;
else
j=1000;
end
end

%Perbandingan bit-bit biner

```

```

for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-S(i))^2;
    end
    er=er/196;
    s(k)=er;
end
kc4=s(1);
yk4=1;
for k=2:260
    if(kc4>s(k))
        kc4=s(k);
        yk4=k;
    end
end

if yk4 <= 26
    huruf4=char(yk4+64);
else
    yk4=mod(yk4,26);
    huruf4=char(64+yk4);
end

S=input5*w;
for p=1:196
    if S(p)< 0
        S(p)=0;
    else
        S(p)=1;
    end
end

%Proses iterasi
for j=1:1000
    T=S*w;
    for p=1:196
        if T(p)< 0
            T(p)=0;
        else
            T(p)=1;
        end
    end

    beda=0;
    for i=1:196
        beda=beda+(S(i)-T(i));
    end
    if beda>0
        S=T;
    else
        j=1000;
    end
end

%Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-S(i))^2;
    end
    er=er/196;
    s(k)=er;
end
kc5=s(1);
yk5=1;
for k=2:260
    if(kc5>s(k))
        kc5=s(k);
    end
end

    yk5=k;
end
end

if yk5 <= 26
    huruf5=char(yk5+64);
else
    yk5=mod(yk5,26);
    huruf5=char(64+yk5);
end

set(proyek.edit1,'string',char([huruf1    huruf2    huruf3
huruf4 huruf5]));
set(proyek.edit1,'userdata',char([huruf1    huruf2    huruf3
huruf4 huruf5]));

case 10
    %Perhitungan Bobot
    w= w1'* w1 + a1'* a1 + h1'* h1 + y1'* y1 + u1'* u1 ;
    %Diagonal matriks dinolkan
    for k=1:196
        for l=1:196
            if k==l
                w(k,l)=0;
            end
        end
    end

    proyek=guidata(gcbo);
    input=get(proyek,gbr,'userdata');

    input1=input(1:14,1:14);
    input1=reshape(input1,1,196);  input1=single(input1);
    input2=input(1:14,15:28);
    input2=reshape(input2,1,196);  input2=single(input2);
    input3=input(1:14,29:42);
    input3=reshape(input3,1,196);  input3=single(input3);
    input4=input(1:14,43:56);
    input4=reshape(input4,1,196);  input4=single(input4);
    input5=input(1:14,57:70);
    input5=reshape(input5,1,196);  input5=single(input5);

    S=input1*w;
    for p=1:196
        if S(p)< 0
            S(p)=0;
        else
            S(p)=1;
        end
    end

    %Proses iterasi
    for j=1:1000
        T=S*w;
        for p=1:196
            if T(p)< 0
                T(p)=0;
            else
                T(p)=1;
            end
        end

        beda=0;
        for i=1:196
            beda=beda+(S(i)-T(i));
        end
        if beda>0
            S=T;
        end
    end

```

```

        else
            j=1000;
        end
    end

    % Perbandingan bit-bit biner
    for k=1:260
        er=0;
        for i=1:196
            er=er+(x(k,i)-T(i))^2;
        end
        er=er/196;
        s(k)=er;
    end
    kc1=s(1);
    yk1=1;
    for k=2:260
        if(kc1>s(k))
            kc1=s(k);
            yk1=k;
        end
    end
    if yk1 <= 26
        huruf1=char(yk1+64);
    else
        yk1=mod(yk1,26);
        huruf1=char(64+yk1);
    end

    S=input3*w;
    for p=1:196
        if S(p)< 0
            S(p)=0;
        else
            S(p)=1;
        end
    end

    %Proses iterasi
    for j=1:1000
        T=S*w;
        for p=1:196
            if T(p)< 0
                T(p)=0;
            else
                T(p)=1;
            end
            beda=0;
            for i=1:196
                beda=beda+(S(i)-T(i));
            end
            if beda>0
                S=T;
            else
                j=1000;
            end
        end

        %Perbandingan bit-bit biner
        for k=1:260
            er=0;
            for i=1:196
                er=er+(x(k,i)-S(i))^2;
            end
            er=er/196;
            s(k)=er;
        end
        kc3=s(1);
        yk3=1;
        for k=2:260
            if(kc3>s(k))
                kc3=s(k);
                yk3=k;
            end
        end
        if yk3 <= 26
            huruf2=char(yk3+64);
        else
            yk3=mod(yk3,26);
        end
    end
end

```

```

        huruf3=char(64+yk3);
    end

    %Proses iterasi
    for j=1:1000
        T=S*w;
        for p=1:196
            if T(p)< 0
                T(p)=0;
            else
                T(p)=1;
            end
        end

        beda=0;
        for i=1:196
            beda=beda+(S(i)-T(i));
        end

        if beda>0
            S=T;
        else
            j=1000;
        end

    end

    %Perbandingan bit-bit biner
    for k=1:260
        er=0;
        for i=1:196
            er=er+(x(k,i)-S(i))^2;
        end

        er=er/196;
        s(k)=er;
    end

    kc5=s(1);
    yk5=1;
    for k=2:260
        if(kc5>s(k))
            kc5=s(k);
            yk5=k;
        end
    end

    if yk5 <= 26
        huruf5=char(yk5+64);
    else
        yk5=mod(yk5,26);
        huruf5=char(64+yk5);
    end

    set(proyek.edit1,'string',char([huruf1    huruf2    huruf3
                                    huruf4                  huruf5]));
    set(proyek.edit1,'userdata',char([huruf1    huruf2    huruf3
                                    huruf4    huruf5]));

if yk4 <= 26
    huruf4=char(yk4+64);
else
    yk4=mod(yk4,26);
    huruf4=char(64+yk4);
end

    %Diagonal matriks dinolkan
    for k=1:196
        for l=1:196
            if k==l
                w(k,l)=0;
            end
        end
    end

    proyek=guidata(gcbo);
    input=get(proyek,gbr,'userdata');

S=input5*w;
for p=1:196
    if S(p)< 0
        S(p)=0;
    else
        S(p)=1;
    end
end

```

```

input1=input(1:14,1:14);
input1=reshape(input1,1,196); input1=single(input1);
input2=input(1:14,15:28);
input2=reshape(input2,1,196); input2=single(input2);
input3=input(1:14,29:42);
input3=reshape(input3,1,196); input3=single(input3);
input4=input(1:14,43:56);
input4=reshape(input4,1,196); input4=single(input4);
input5=input(1:14,57:70);
input5=reshape(input5,1,196); input5=single(input5);

S=input1*w;
for p=1:196
    if S(p)< 0
        S(p)=0;
    else
        S(p)=1;
    end
end

%Proses iterasi
for j=1:1000
    T=S*w;
    for p=1:196
        if T(p)< 0
            T(p)=0;
        else
            T(p)=1;
        end
    end

    beda=0;
    for i=1:196
        beda=beda+(S(i)-T(i));
    end
    if beda>0
        S=T;
    else
        j=1000;
    end
end

%Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-S(i))^2;
    end
    er=er/196;
    s(k)=er;
end
kc2=s(1);
yk2=1;
for k=2:260
    if(kc2>s(k))
        kc2=s(k);
        yk2=k;
    end
end

if yk2 <= 26
    huruf2=char(yk2+64);
else
    yk2=mod(yk2,26);
    huruf2=char(64+yk2);
end

S=input3*w;
for p=1:196
    if S(p)< 0
        S(p)=0;
    else
        S(p)=1;
    end
end

%Proses iterasi
for j=1:1000
    T=S*w;
    for p=1:196
        if T(p)< 0
            T(p)=0;
        else

```

```

T(p)=1;
end
end

beda=0;
for i=1:196
    beda=beda+(S(i)-T(i));
end
if beda>0
    S=T;
else
    j=1000;
end
end

%Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-S(i))^2;
    end
    er=er/196;
    s(k)=er;
end
kc4=s(1);
yk4=1;
for k=2:260
    if(kc4>s(k))
        kc4=s(k);
        yk4=k;
    end
end
if yk4 <= 26
    huruf4=char(yk4+64);
else
    yk4=mod(yk4,26);
    huruf4=char(64+yk4);
end

S=input5*w;
for p=1:196
    if S(p)< 0
        S(p)=0;
    else
        S(p)=1;
    end
end

%Proses iterasi
for j=1:1000
    T=S*w;
    for p=1:196
        if T(p)< 0
            T(p)=0;
        else
            T(p)=1;
        end
    end
    beda=0;
    for i=1:196
        beda=beda+(S(i)-T(i));
    end
    if beda>0
        S=T;
    else
        j=1000;
    end
end

%Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-S(i))^2;
    end
    er=er/196;
    s(k)=er;
end
kc5=s(1);
yk5=1;

```

```

for k=2:260
    if(kc5>s(k))
        kc5=s(k);
        yk5=k;
    end
end

if yk5 <= 26
    huruf5=char(yk5+64);
else
    yk5=mod(yk5,26);
    huruf5=char(64+yk5);
end

set(proyek.edit1,'string',char([huruf1    huruf2    huruf3
huruf4                                huruf5]));
set(proyek.edit1,'userdata',char([huruf1    huruf2    huruf3
huruf4    huruf5]));

%Perhitungan Bobot
w= b1'* b1 + e1'* e1 + d1'* d1 ;

%Diagonal matriks dinolkan
for k=1:196
    for l=1:196
        if k==l
            w(k,l)=0;
        end
    end
end

proyek=guidata(gcbo);
input=get(proyek.gbr,'userdata');

input1=input(1:14,1:14);
input1=reshape(input1,1,196); input1=single(input1);
input2=input(1:14,15:28);
input2=reshape(input2,1,196); input2=single(input2);
input3=input(1:14,29:42);
input3=reshape(input3,1,196); input3=single(input3);

S=input1*w;
for p=1:196
    if S(p)< 0
        S(p)=0;
    else
        S(p)=1;
    end
end

%Proses iterasi
for j=1:1000
    T=S*w;
    for p=1:196
        if T(p)< 0
            T(p)=0;
        else
            T(p)=1;
        end
    end

    beda=0;
    for i=1:196
        beda=beda+(S(i)-T(i));
    end

    if beda>0
        S=T;
    else
        j=1000;
    end
end

%Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-T(i))^2;
    end
    er=er/196;
    s(k)=er;
end

kc1=s(1);
yk1=1;
for k=2:260
    if(kc1>s(k))
        kc1=s(k);
        yk1=k;
    end
end

if yk1 <= 26
    huruf1=char(yk1+64);
else
    yk1=mod(yk1,26);
    huruf1=char(64+yk1);
end

S=input2*w;
for p=1:196
    if S(p)< 0
        S(p)=0;
    else
        S(p)=1;
    end
end

%Proses Iterasi
for j=1:1000
    T=S*w;
    for p=1:196
        if T(p)< 0
            T(p)=0;
        else
            T(p)=1;
        end
    end

    beda=0;
    for i=1:196
        beda=beda+(S(i)-T(i));
    end

    if beda>0
        S=T;
    else
        j=1000;
    end
end

%Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-S(i))^2;
    end
end

```

```

        end
        er=er/196;
        s(k)=er;
    end
    kc2=s(1);
    yk2=1;
    for k=2:260
        if(kc2>s(k))
            kc2=s(k);
            yk2=k;
        end
    end
    if yk2 <= 26
        huruf2=char(yk2+64);
    else
        yk2=mod(yk2,26);
        huruf2=char(64+yk2);
    end
    set(proyek.edit1,'string',char([huruf1 huruf2 huruf3]));
    set(proyek.edit1,'userdata',char([huruf1         huruf2
huruf3]));
end

case 2
    %Perhitungan Bobot
    w= c1'* c1 + a1'* a1 + r1'* r1 ;
    %Diagonal matriks dinolkan
    for k=1:196
        for l=1:196
            if k==l
                w(k,l)=0;
            end
        end
    end
    proyek=guidata(gcbo);
    input=get(proyek.gbr,'userdata');

    input1=input(1:14,1:14);
    input1=reshape(input1,1,196);  input1=single(input1);
    input2=input(1:14,15:28);
    input2=reshape(input2,1,196);  input2=single(input2);
    input3=input(1:14,29:42);
    input3=reshape(input3,1,196);  input3=single(input3);

    S=input1*w;
    for p=1:196
        if S(p)< 0
            S(p)=0;
        else
            S(p)=1;
        end
    end

    %Proses iterasi
    for j=1:1000
        T=S*w;
        for p=1:196
            if T(p)< 0
                T(p)=0;
            else
                T(p)=1;
            end
        end
        beda=0;
        for i=1:196
            beda=beda+(S(i)-T(i));
        end
        if beda>0
            S=T;
        else
            j=1000;
        end
    end

    %Perbandingan bit-bit biner
    for k=1:260
        er=0;
        for i=1:196
            er=er+(x(k,i)-S(i))^2;
        end
        er=er/196;
        s(k)=er;
    end
    kc3=s(1);
    yk3=1;
    for k=2:260
        if(kc3>s(k))
            kc3=s(k);
            yk3=k;
        end
    end
end

if yk3 <= 26
    huruf3=char(yk3+64);
else
    yk3=mod(yk3,26);
    huruf3=char(64+yk3);
end

```

```

        end
        er=er/196;
        s(k)=er;
    end
    kc1=s(1);
    yk1=1;
    for k=2:260
        if(kc1>s(k))
            kc1=s(k);
            yk1=k;
        end
    end
    if yk1 <= 26
        huruf1=char(yk1+64);
    else
        yk1=mod(yk1,26);
        huruf1=char(64+yk1);
    end

    S=input2*w;
    for p=1:196
        if S(p)< 0
            S(p)=0;
        else
            S(p)=1;
        end
    end

    %Proses Iterasi
    for j=1:1000
        T=S*w;
        for p=1:196
            if T(p)< 0
                T(p)=0;
            else
                T(p)=1;
            end
        end
        beda=0;
        for i=1:196
            beda=beda+(S(i)-T(i));
        end
        if beda>0
            S=T;
        else
            j=1000;
        end
    end

    %Perbandingan bit-bit biner
    for k=1:260
        er=0;
        for i=1:196
            er=er+(x(k,i)-S(i))^2;
        end
        er=er/196;
        s(k)=er;
    end
    kc3=s(1);
    yk3=1;
    for k=2:260
        if(kc3>s(k))
            kc3=s(k);
            yk3=k;
        end
    end
    if yk3 <= 26
        huruf3=char(yk3+64);
    else
        yk3=mod(yk3,26);
        huruf3=char(64+yk3);
    end

    set(proyek.edit1,'string',char([huruf1 huruf2 huruf3]));
    set(proyek.edit1,'userdata',char([huruf1           huruf2
                                     huruf3]));
end

case 3
    %Perhitungan Bobot

```

```

w= f1'* f1 + q1'* q1 + m1'* m1 ;

%Diagonal matriks dinolkan
for k=1:196
    for l=1:196
        if k==l
            w(k,l)=0;
        end
    end
end

proyek=guidata(gcbo);
input=get(proyek,gbr,'userdata');

input1=input(1:14,1:14);
input1=reshape(input1,1,196); input1=single(input1);
input2=input(1:14,15:28);
input2=reshape(input2,1,196); input2=single(input2);
input3=input(1:14,29:42);
input3=reshape(input3,1,196); input3=single(input3);

S=input1*w;
for p=1:196
    if S(p)< 0
        S(p)=0;
    else
        S(p)=1;
    end
end

%Proses iterasi
for j=1:1000
    T=S*w;
    for p=1:196
        if T(p)< 0
            T(p)=0;
        else
            T(p)=1;
        end
    end

    beda=0;
    for i=1:196
        beda=beda+(S(i)-T(i));
    end
    if beda>0
        S=T;
    else
        j=1000;
    end

    %Perbandingan bit-bit biner
    for k=1:260
        er=0;
        for i=1:196
            er=er+(x(k,i)-S(i))^2;
        end
        er=er/196;
        s(k)=er;
    end
    kc2=s(1);
    yk2=1;
    for k=2:260
        if(kc2>s(k))
            kc2=s(k);
            yk2=k;
        end
    end

    if yk2 <= 26
        huruf2=char(yk2+64);
    else
        yk2=mod(yk2,26);
        huruf2=char(64+yk2);
    end

    S=input3*w;
    for p=1:196
        if S(p)< 0
            S(p)=0;
        else
            S(p)=1;
        end
    end
end

```

```

    end

%Proses iterasi
for j=1:1000
    T=S*w;
    for p=1:196
        if T(p)< 0
            T(p)=0;
        else
            T(p)=1;
        end
    end

    beda=0;
    for i=1:196
        beda=beda+(S(i)-T(i));
    end

    if beda>0
        S=T;
    else
        j=1000;
    end
end

%Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-S(i))^2;
    end
    er=er/196;
    s(k)=er;
end

kc3=s(1);
yk3=1;
for k=2:260
    if(kc3>s(k))
        kc3=s(k);
        yk3=k;
    end
end

if yk3 <= 26
    huruf3=char(yk3+64);
else
    yk3=mod(yk3,26);
    huruf3=char(64+yk3);
end

set(proyek.edit1,'string',char([huruf1 huruf2 huruf3]));
set(proyek.edit1,'userdata',char([huruf1         huruf2
huruf3]));

case 4
    %Perhitungan Bobot
    w= h1'* h1 + o1'* o1 + w1'* w1 ;

%Diagonal matriks dinolkan
for k=1:196
    for l=1:196
        if k==l
            w(k,l)=0;
        end
    end
end

proyek=guidata(gcbo);
input=get(proyek.gbr,'userdata');

    input1=input(1:14,1:14);
    input1=reshape(input1,1,196); input1=single(input1);
    input2=input(1:14,15:28);
    input2=reshape(input2,1,196); input2=single(input2);
    input3=input(1:14,29:42);
    input3=reshape(input3,1,196); input3=single(input3);

    S=input1*w;
    for p=1:196
        if S(p)< 0
            S(p)=0;
        else
            S(p)=1;
        end
    end

%Proses iterasi
for j=1:1000
    T=S*w;
    for p=1:196
        if T(p)< 0
            T(p)=0;
        else
            T(p)=1;
        end
    end

    beda=0;
    for i=1:196
        beda=beda+(S(i)-T(i));
    end

    if beda>0
        S=T;
    else
        j=1000;
    end
end

%Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-T(i))^2;
    end
    er=er/196;
    s(k)=er;
end

kc1=s(1);
yk1=1;
for k=2:260
    if(kc1>s(k))
        kc1=s(k);
        yk1=k;
    end
end

if yk1 <= 26
    huruf1=char(yk1+64);
else
    yk1=mod(yk1,26);
    huruf1=char(64+yk1);
end

S=input2*w;
for p=1:196
    if S(p)< 0
        S(p)=0;
    else
        S(p)=1;
    end
end

```

```

        end
    end

%Proses Iterasi
for j=1:1000
    T=S*w;
    for p=1:196
        if T(p)< 0
            T(p)=0;
        else
            T(p)=1;
        end
    end
    beda=0;
    for i=1:196
        beda=beda+(S(i)-T(i));
    end
    if beda>0
        S=T;
    else
        j=1000;
    end
end

%Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-S(i))^2;
    end
    er=er/196;
    s(k)=er;
end
kc3=s(1);
yk3=1;
for k=2:260
    if(kc3>s(k))
        kc3=s(k);
        yk3=k;
    end
end

if yk3 <= 26
    huruf3=char(yk3+64);
else
    yk3=mod(yk3,26);
    huruf3=char(64+yk3);
end

set(proyek.edit1,'string',char([huruf1 huruf2 huruf3]));
set(proyek.edit1,'userdata',char([huruf1           huruf2
huruf3]));

case 5
    %Perhitungan Bobot
    w= j1'* j1 + o1'* o1 + y1'* y1 ;
    %Diagonal matriks dinolkan
    for k=1:196
        for l=1:196
            if k==l
                w(k,l)=0;
            end
        end
    end

    proyek=guidata(gcbo);
    input=get(proyek.gbr,'userdata');

    input1=input(1:14,1:14);
    input1=reshape(input1,1,196);  input1=single(input1);
    input2=input(1:14,15:28);
    input2=reshape(input2,1,196);  input2=single(input2);
    input3=input(1:14,29:42);
    input3=reshape(input3,1,196);  input3=single(input3);

    S=input1*w;
    for p=1:196
        if S(p)< 0
            S(p)=0;
        else
            S(p)=1;
        end
    end
end

%Proses iterasi
for j=1:1000
    T=S*w;
    for p=1:196
        if T(p)< 0
            T(p)=0;
        else
            T(p)=1;
        end
    end
    beda=0;
    for i=1:196
        beda=beda+(S(i)-T(i));
    end
    if beda>0
        S=T;
    else
        j=1000;
    end
end

```

```

        end
    end

%Proses iterasi
for j=1:1000
    T=S*w;
    for p=1:196
        if T(p)< 0
            T(p)=0;
        else
            T(p)=1;
        end
    end
    beda=0;
    for i=1:196
        beda=beda+(S(i)-T(i));
    end
        if beda>0
            S=T;
        else
            j=1000;
        end
    end

%Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-S(i))^2;
    end
    er=er/196;
    s(k)=er;
    end
    kc2=s(1);
    yk2=1;
    for k=2:260
        if(kc2>s(k))
            kc2=s(k);
            yk2=k;
        end
    end
end

%Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-T(i))^2;
    end
    er=er/196;
    s(k)=er;
    end
    kc1=s(1);
    yk1=1;
    for k=2:260
        if(kc1>s(k))
            kc1=s(k);
            yk1=k;
        end
    end
    if yk1 <= 26
        huruf1=char(yk1+64);
    else
        yk1=mod(yk1,26);
        huruf1=char(64+yk1);
    end
    S=input3*w;
    for p=1:196
        if S(p)< 0
            S(p)=0;
        else
            S(p)=1;
        end
    end

%Proses iterasi
for j=1:1000
    T=S*w;
    for p=1:196
        if T(p)< 0
            T(p)=0;
        else
            T(p)=1;
        end
    end
    beda=0;
    for i=1:196
        beda=beda+(S(i)-T(i));
    end
        if beda>0
            S=T;
        else
            j=1000;
        end
    end

%Perbandingan bit-bit biner
for k=1:260
    er=0;

```

```

for i=1:196
    er=er+(x(k,i)-S(i))^2;
end
er=er/196;
s(k)=er;
end
kc3=s(1);
yk3=1;
for k=2:260
    if(kc3>s(k))
        kc3=s(k);
        yk3=k;
    end
end

if yk3 <= 26
    huruf3=char(yk3+64);
else
    yk3=mod(yk3,26);
    huruf3=char(64+yk3);
end

set(proyek.edit1,'string',char([huruf1  huruf2  huruf3]));
set(proyek.edit1,'userdata',char([huruf1          huruf2
huruf3]));

case 6
    %Perhitungan Bobot
w= k1*k1 + z1*z1 + v1*v1 ;

%Diagonal matriks dinolkan
for k=1:196
    for l=1:196
        if k==l
            w(k,l)=0;
        end
    end
end

proyek=guidata(gcbo);
input=get(proyek.gbr,'userdata');

input1=input(1:14,1:14);
input1=reshape(input1,1,196); input1=single(input1);
input2=input(1:14,15:28);
input2=reshape(input2,1,196); input2=single(input2);
input3=input(1:14,29:42);
input3=reshape(input3,1,196); input3=single(input3);

S=input1*w;
for p=1:196
    if S(p)< 0
        S(p)=0;
    else
        S(p)=1;
    end
end

%Proses iterasi
for j=1:1000
    T=S*w;
    for p=1:196
        if T(p)< 0
            T(p)=0;
        else
            T(p)=1;
        end
    end

    beda=0;
    for i=1:196
        beda=beda+(S(i)-T(i));
    end
    if beda>0
        S=T;
    else
        j=1000;
    end
end

%Perbandingan bit-bit biner
for k=1:260
    er=0;

```

```

for i=1:196
    er=er+(x(k,i)-S(i))^2;
end
er=er/196;
s(k)=er;
if kc2>s(k)
    kc2=s(k);
    yk2=k;
end
for k=2:260
    if(kc2>s(k))
        kc2=s(k);
        yk2=k;
    end
end
if yk2 <= 26
    huruf2=char(yk2+64);
else
    yk3=mod(yk2,26);
    huruf2=char(64+yk3);
end
set(proyek.edit1,'string',char([huruf1 huruf2 huruf3]));
set(proyek.edit1,'userdata',char([huruf1         huruf2
huruf3]));

case 7
    %Perhitungan Bobot
    w= 11'* l1 + u1'* u1 + x1'* x1 ;
    %Diagonal matriks dinolkan
    for k=1:196
        for l=1:196
            if k==l
                w(k,l)=0;
            end
        end
    end
    proyek=guidata(gcbo);
    input=get(proyek,gbr,'userdata');

    input1=input(1:14,1:14);
    input1=reshape(input1,1,196);  input1=single(input1);
    input2=input(1:14,15:28);
    input2=reshape(input2,1,196);  input2=single(input2);
    input3=input(1:14,29:42);
    input3=reshape(input3,1,196);  input3=single(input3);

    S=input1*w;
    for p=1:196
        if S(p)< 0
            S(p)=0;
        else
            S(p)=1;
        end
    end
    beda=0;
    for i=1:196
        beda=beda+(S(i)-T(i));
    end
    if beda>0
        S=T;
    else
        j=1000;
    end
end
%Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-S(i))^2;
    end
    er=er/196;
    s(k)=er;
end
kc3=s(1);
yk3=1;
for k=2:260
    if(kc3>s(k))
        kc3=s(k);
        yk3=k;
    end
end
%Perbandingan bit-bit biner
for k=1:260
    er=0;

```

```

for i=1:196
    er=er+(x(k,i)-T(i))^2;
end
er=er/196;
s(k)=er;
end
kc1=s(1);
yk1=1;
for k=2:260
    if(kc1>s(k))
        kc1=s(k);
        yk1=k;
    end
end
if yk1 <= 26
    huruf1=char(yk1+64);
else
    yk2=mod(yk1,26);
    huruf1=char(64+yk2);
end

S=input3*w;
for p=1:196
    if S(p)< 0
        S(p)=0;
    else
        S(p)=1;
    end
end

%Proses iterasi
for j=1:1000
    T=S*w;
    for p=1:196
        if T(p)< 0
            T(p)=0;
        else
            T(p)=1;
        end
    end
    beda=0;
    for i=1:196
        beda=beda+(S(i)-T(i));
    end
    if beda>0
        S=T;
    else
        j=1000;
    end
end

%Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-S(i))^2;
    end
    er=er/196;
    s(k)=er;
end
kc3=s(1);
yk3=1;
for k=2:260
    if(kc3>s(k))
        kc3=s(k);
        yk3=k;
    end
end
if yk3 <= 26
    huruf3=char(yk3+64);
else
    yk3=mod(yk3,26);
    huruf3=char(64+yk3);
end

set(proyek.edit1,'string',char([huruf1 huruf2 huruf3]));
set(proyek.edit1,'userdata',char([huruf1           huruf2
huruf3]));

```

```

case 8
    %Perhitungan Bobot
    w= p1'* p1 + i1'* i1 + g1'* g1;

    %Diagonal matriks dinolkan
    for k=1:196
        for l=1:196
            if k==l
                w(k,l)=0;
            end
        end
    end

    proyek=guidata(gcbo);
    input=get(proyek.gbr,'userdata');

    input1=input(1:14,1:14);
    input1=reshape(input1,1,196); input1=single(input1);
    input2=input(1:14,15:28);
    input2=reshape(input2,1,196); input2=single(input2);
    input3=input(1:14,29:42);
    input3=reshape(input3,1,196); input3=single(input3);

    S=input1*w;
    for p=1:196
        if S(p)< 0
            S(p)=0;
        else
            S(p)=1;
        end
    end

    %Proses iterasi
    for j=1:1000
        T=S*w;
        for p=1:196
            if T(p)< 0
                T(p)=0;
            else
                T(p)=1;
            end
        end

        beda=0;
        for i=1:196
            beda=beda+(S(i)-T(i));
        end
        if beda>0
            S=T;
        else
            j=1000;
        end
    end

    %Perbandingan bit-bit biner
    for k=1:260
        er=0;
        for i=1:196
            er=er+(x(k,i)-S(i))^2;
        end
        er=er/196;
        s(k)=er;
    end

    kc2=s(1);
    yk2=1;
    for k=2:260
        if(kc2>s(k))
            kc2=s(k);
            yk2=k;
        end
    end

    if yk2 <= 26
        huruf2=char(yk2+64);
    else
        yk2=mod(yk2,26);
        huruf2=char(64+yk2);
    end

    S=input3*w;
    for p=1:196
        if S(p)< 0
            S(p)=0;
        else

```

```

S(p)=1;
end
end

%Proses iterasi
for j=1:1000
    T=S*w;
    for p=1:196
        if T(p)< 0
            T(p)=0;
        else
            T(p)=1;
        end
    end

    beda=0;
    for i=1:196
        beda=beda+(S(i)-T(i));
    end
    if beda>0
        S=T;
    else
        j=1000;
    end
end

%Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-S(i))^2;
    end
    er=er/196;
    s(k)=er;
end
kc3=s(1);
yk3=1;
for k=2:260
    if(kc3>s(k))
        kc3=s(k);
        yk3=k;
    end
end

if yk3 <= 26
    huruf3=char(yk3+64);
else
    yk3=mod(yk3,26);
    huruf3=char(64+yk3);
end

set(proyek.edit1,'string',char([huruf1 huruf2 huruf3]));
set(proyek.edit1,'userdata',char([huruf1           huruf2
huruf3]));

case 9
    % Perhitungan Bobot
    w= s1'* s1 + u1'* u1 + n1'* n1 ;

    %Diagonal matriks dinolkan
    for k=1:196
        for l=1:196
            if k==l
                w(k,l)=0;
            end
        end
    end

    proyek=guidata(gcbo);

    input=get(proyek.gbr,'userdata');

    input1=input(1:14,1:14);
    input1=reshape(input1,1,196); input1=single(input1);
    input2=input(1:14,15:28);
    input2=reshape(input2,1,196); input2=single(input2);
    input3=input(1:14,29:42);
    input3=reshape(input3,1,196); input3=single(input3);

    S=input2*w;
    for p=1:196
        if S(p)< 0
            S(p)=0;
        else
            S(p)=1;
        end
    end

    %Proses iterasi
    for j=1:1000
        T=S*w;
        for p=1:196
            if T(p)< 0
                T(p)=0;
            else
                T(p)=1;
            end
        end

        beda=0;
        for i=1:196
            beda=beda+(S(i)-T(i));
        end
        if beda>0
            S=T;
        else
            j=1000;
        end
    end

    %Perbandingan bit-bit biner
    for k=1:260
        er=0;
        for i=1:196
            er=er+(x(k,i)-T(i))^2;
        end
        er=er/196;
        s(k)=er;
    end
    kc1=s(1);
    yk1=1;
    for k=2:260
        if(kc1>s(k))
            kc1=s(k);
            yk1=k;
        end
    end

    if yk1 <= 26
        huruf1=char(yk1+64);
    else
        yk1=mod(yk1,26);
        huruf1=char(64+yk1);
    end

    S=input2*w;
    for p=1:196
        if S(p)< 0
            S(p)=0;
        else

```

```

S(p)=1;
end
end

%Proses Iterasi
for j=1:1000
    T=S*w;
    for p=1:196
        if T(p)< 0
            T(p)=0;
        else
            T(p)=1;
        end
    end

    beda=0;
    for i=1:196
        beda=beda+(S(i)-T(i));
    end
    if beda>0
        S=T;
    else
        j=1000;
    end
end

%Perbandingan bit-bit biner
for k=1:260
    er=0;
    for i=1:196
        er=er+(x(k,i)-S(i))^2;
    end
    er=er/196;
    s(k)=er;
end
kc3=s(1);
yk3=1;
for k=2:260
    if(kc3>s(k))
        kc3=s(k);
        yk3=k;
    end
end

if yk3 <= 26
    huruf3=char(yk3+64);
else
    yk3=mod(yk3,26);
    huruf3=char(64+yk3);
end

set(proyek.edit1,'string',char([huruf1  huruf2  huruf3]));
set(proyek.edit1,'userdata',char([huruf1          huruf2
huruf3]));

case 10
    %Perhitungan Bobot
    w= t1'* t1 + e1'* e1 + a1'* a1 ;
    %Diagonal matriks dinolkan
    for k=1:196
        for l=1:196
            if k==l
                w(k,l)=0;
            end
        end
    end

    proyek=guidata(gcbo);
    input=get(proyek,gbr,'userdata');

    input1=input(1:14,1:14);
    input1=reshape(input1,1,196);  input1=single(input1);
    input2=input(1:14,15:28);
    input2=reshape(input2,1,196);  input2=single(input2);
    input3=input(1:14,29:42);
    input3=reshape(input3,1,196);  input3=single(input3);

    S=input1*w;
    for p=1:196
        if S(p)< 0
            S(p)=0;
        else
            S(p)=1;
        end
    end
end

```

```

S(p)=1;
end
end

%Proses iterasi
for j=1:1000
T=S*w;
for p=1:196
if T(p)< 0
T(p)=0;
else
T(p)=1;
end
end

beda=0;
for i=1:196
beda=beda+(S(i)-T(i));
end
if beda>0
S=T;
else
j=1000;
end
end

%Perbandingan bit-bit biner
for k=1:260
er=0;
for i=1:196
er=er+(x(k,i)-S(i))^2;
end
er=er/196;
s(k)=er;
end
kc2=s(1);
yk2=1;
for k=2:260
if(kc2>s(k))
kc2=s(k);
yk2=k;
end
end

%Perbandingan bit-bit biner
for k=1:260
er=0;
for i=1:196
er=er+(x(k,i)-T(i))^2;
end
er=er/196;
s(k)=er;
end
kc1=s(1);
yk1=1;
for k=2:260
if(kc1>s(k))
kc1=s(k);
yk1=k;
end
end

if yk1 <= 26
huruf1=char(yk1+64);
else
yk1=mod(yk1,26);
huruf1=char(64+yk1);
end

S=input3*w;
for p=1:196
if S(p)< 0
S(p)=0;
else
S(p)=1;
end
end

%Proses iterasi
for j=1:1000
T=S*w;
for p=1:196
if T(p)< 0
T(p)=0;
else
T(p)=1;
end
end

beda=0;
for i=1:196
beda=beda+(S(i)-T(i));
end
if beda>0
S=T;
else
j=1000;
end
end

%Perbandingan bit-bit biner
for k=1:260

```

```

er=0;
for i=1:196
    er=er+(x(k,i)-S(i))^2;
end
er=er/196;
s(k)=er;
end

kc3=s(1);
yk3=1;
for k=2:260
    if(kc3>s(k))
        kc3=s(k);
        yk3=k;
    end
end

if yk3 <= 26
    huruf3=char(yk3+64);
else
    yk3=mod(yk3,26);
    huruf3=char(64+yk3);
end

set(proyek.edit1,'string',char([huruf1 huruf2 huruf3]));
set(proyek.edit1,'userdata',char([huruf1         huruf2
huruf3]));
end
end

% --- Executes on button press in btnklr.
function btnklr_Callback(hObject, eventdata, handles)
% hObject handle to btnklr (see GCBO)
% eventdata reserved - to be defined in a future version
of MATLAB
% handles structure with handles and user data (see
GUIDATA)
close;

function edit1_Callback(hObject, eventdata, handles)
% hObject handle to edit1 (see GCBO)
% eventdata reserved - to be defined in a future version
of MATLAB
% handles structure with handles and user data (see
GUIDATA)

% Hints: get(hObject,'String') returns contents of edit1
as text
% str2double(get(hObject,'String')) returns contents
of edit1 as a double

% --- Executes during object creation, after setting all
properties.
function edit1_CreateFcn(hObject, eventdata, handles)
% hObject handle to edit1 (see GCBO)
% eventdata reserved - to be defined in a future version
of MATLAB
% handles empty - handles not created until after all
CreateFcns called

% Hint: edit controls usually have a white background
on Windows.
% See ISPC and COMPUTER.
if ispc && isequal(get(hObject,'BackgroundColor'),
get(0,'defaultUicontrolBackgroundColor'))
    set(hObject,'BackgroundColor','white');
end

% --- Executes on selection change in popup1.

function popup1_Callback(hObject, eventdata, handles)
% hObject handle to popup1 (see GCBO)
% eventdata reserved - to be defined in a future version
of MATLAB
% handles structure with handles and user data (see
GUIDATA)

% Hints: contents = get(hObject,'String') returns
popup1 contents as cell array
% contents{get(hObject,'Value')} returns selected
item from popup1

% --- Executes during object creation, after setting all
properties.
function popup1_CreateFcn(hObject, eventdata,
handles)
% hObject handle to popup1 (see GCBO)
% eventdata reserved - to be defined in a future version
of MATLAB
% handles empty - handles not created until after all
CreateFcns called

% Hint: popupmenu controls usually have a white
background on Windows.
% See ISPC and COMPUTER.
if ispc && isequal(get(hObject,'BackgroundColor'),
get(0,'defaultUicontrolBackgroundColor'))
    set(hObject,'BackgroundColor','white');

% --- Executes on selection change in popup2.

function popup2_Callback(hObject, eventdata, handles)
% hObject handle to popup2 (see GCBO)
% eventdata reserved - to be defined in a future version
of MATLAB
% handles structure with handles and user data (see
GUIDATA)

% Hints: contents = get(hObject,'String') returns
popup2 contents as cell array
% contents{get(hObject,'Value')} returns selected
item from popup2

% --- Executes during object creation, after setting all
properties.
function popup2_CreateFcn(hObject, eventdata,
handles)
% hObject handle to popup2 (see GCBO)
% eventdata reserved - to be defined in a future version
of MATLAB
% handles empty - handles not created until after all
CreateFcns called

% Hint: popupmenu controls usually have a white
background on Windows.
% See ISPC and COMPUTER.
if ispc && isequal(get(hObject,'BackgroundColor'),
get(0,'defaultUicontrolBackgroundColor'))
    set(hObject,'BackgroundColor','white');

% --- Executes on selection change in popup3.

function popup3_Callback(hObject, eventdata, handles)
% hObject handle to popup3 (see GCBO)
% eventdata reserved - to be defined in a future version
of MATLAB
% handles structure with handles and user data (see
GUIDATA)

% Hints: contents = get(hObject,'String') returns
popup3 contents as cell array

```

```
%      contents{get(hObject,'Value')} returns selected
item from popup3

% --- Executes during object creation, after setting all
properties.
function    popup3_CreateFcn(hObject, eventdata,
handles)
% hObject handle to popup3 (see GCBO)
% eventdata reserved - to be defined in a future version
of MATLAB
% handles empty - handles not created until after all
CreateFcns called

% Hint: popupmenu controls usually have a white
background on Windows.
% See ISPC and COMPUTER.
if ispc && isequal(get(hObject,'BackgroundColor'),
get(0,'defaultUicontrolBackgroundColor'))
    set(hObject,'BackgroundColor','white');
end
```