

LAMPIRAN A
LISTING PROGRAM

1. Listing Program Utama

```
Dim h As Integer, i As Integer, j As Integer
Dim db(37, 2) As String
Dim angka As String
Private Sub Command1_Click()
    Command1.enabled = False
    Call TWAIN_LogFile(1)

    Call TWAIN_SetHideUI(1)
    Call TWAIN_SetIndicators(0)
    Call TWAIN_SetFileAppendFlag(0)
    Call TWAIN_SetJpegQuality(75)
    If TWAIN_OpenSource("CanoScan D646U") <> 0 Then
        Call TWAIN_SetXferCount(1)

        ' If you can't use Me.hwnd, pass 0:
        Call TWAIN_AcquireToFilename(Me.hwnd, "d:\image.jpg")
        End If
        If TWAIN_LastErrorCode() <> 0 Then
            Call TWAIN_ReportLastError("Unable to scan.")
        End If

        Picture1.Picture = LoadPicture("d:\image.jpg")
        Picture1.Refresh
        Command1.enabled = True
    End Sub

Public Sub Tampil()
    db(1, 1) = "1"
    db(1, 2) = "a"
    db(2, 1) = "3"
    db(2, 2) = "b"
    db(3, 1) = "9"
    db(3, 2) = "c"
```

```
db(4, 1) = "25"
db(4, 2) = "d"
db(5, 1) = "17"
db(5, 2) = "e"
db(6, 1) = "11"
db(6, 2) = "f"
db(7, 1) = "27"
db(7, 2) = "g"
db(8, 1) = "19"
db(8, 2) = "h"
db(9, 1) = "10"
db(9, 2) = "i"
db(10, 1) = "26"
db(10, 2) = "j"
db(11, 1) = "5"
db(11, 2) = "k"
db(12, 1) = "7"
db(12, 2) = "l"
db(13, 1) = "13"
db(13, 2) = "m"
db(14, 1) = "29"
db(14, 2) = "n"
db(15, 1) = "21"
db(15, 2) = "o"
db(16, 1) = "15"
db(16, 2) = "p"
db(17, 1) = "31"
db(17, 2) = "q"
db(18, 1) = "23"
db(18, 2) = "r"
db(19, 1) = "14"
db(19, 2) = "s"
db(20, 1) = "30"
db(20, 2) = "t"
```

```
db(21, 1) = "37"
db(21, 2) = "u"
db(22, 1) = "39"
db(22, 2) = "v"
db(23, 1) = "58"
db(23, 2) = "w"
db(24, 1) = "45"
db(24, 2) = "x"
db(25, 1) = "61"
db(25, 2) = "y"
db(26, 1) = "53"
db(26, 2) = "z"
db(27, 1) = "2"
db(27, 2) = ","
db(28, 1) = "6"
db(28, 2) = " ;"
db(29, 1) = "50"
db(29, 2) = " ."
db(30, 1) = "36"
db(30, 2) = " majemuk"
db(31, 1) = "22"
db(31, 2) = " !"
db(32, 1) = "18"
db(32, 2) = " :"
db(33, 1) = "12"
db(33, 2) = " /"
db(34, 1) = "34"
db(34, 2) = " +"
db(35, 1) = "20"
db(35, 2) = " -"
db(36, 1) = "40"
db(36, 2) = " hrftebal"
db(37, 1) = "32"
db(37, 2) = " hrfbesar"
```

```

i = 1
While (angka <> db(i, 1) And i <= 38)
    i = i + 1
Wend
    Text1.Text = Text1.Text + db(i, 2)
End Sub

Private Sub Command2_Click()
Command2.enabled = False
Text1.Text = ""
t1 = 0
t2 = 0
t3 = 0
t4 = 0
t5 = 0
t6 = 0
For m = 0 To 2
    For n = 0 To 4
        bki = n * 90
        bka = bki + 90
        ba = m * 90
        bbw = ba + 90
        For j = ba To bbw
            For i = bki To bka
                a0 = Picture1.Point(i, j)
                r1 = a0 And RGB(255, 0, 0)
                g1 = (a0 And RGB(0, 255, 0)) \ 256
                b1 = (a0 And RGB(0, 0, 255)) \ 256 \ 256
                grey = (r1 + g1 + b1) / 3
                If ((j > ba + 5) And (j < ba + 25)) And ((i > bki + 5)
                And (i < bki + 35)) Then
                    If ((grey < 64)) Then
                        t1 = t1 + 1
                    End If
                End If
            End For
        End For
    End For
End Sub

```

```

If (j > ba + 35) And (j < ba + 55) And ((i > bki + 5)
And (i < bki + 35)) Then
    If ((grey < 64)) Then
        t2 = t2 + 1
    End If
End If

If (j > ba + 65) And (j < ba + 85) And ((i > bki + 5)
And (i < bki + 35)) Then
    If ((grey < 64)) Then
        t3 = t3 + 1
    End If
End If

If ((j > ba + 5) And (j < ba + 25)) And (i > bki +
50) And (i < bki + 85) Then
    If ((grey < 64)) Then
        t4 = t4 + 1
    End If
End If

If (j > ba + 35) And (j < ba + 55) And ((i > bki +
50) And (i < bki + 85)) Then
    If ((grey < 64)) Then
        t5 = t5 + 1
    End If
End If

If (j > ba + 65) And (j < ba + 85) And ((i > bki +
50) And (i < bki + 85)) Then
    If ((grey < 64)) Then
        t6 = t6 + 1
    End If
End If

Next i
Next j
If (t1 >= 100) Then

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```

t1 = 1
Else: t1 = 0
End If
If (t2 >= 100) Then
t2 = 2
Else: t2 = 0
End If
If (t3 >= 100) Then
t3 = 4
Else: t3 = 0
End If
If (t4 >= 100) Then
t4 = 8
Else: t4 = 0
End If
If (t5 >= 100) Then
t5 = 16
Else: t5 = 0
End If
If (t6 >= 100) Then
t6 = 32
Else: t6 = 0
End If
angka =trim(Str(t1 + t2 + t3 + t4 + t5 + t6))
Call Tampil
t1 = 0
t2 = 0
t3 = 0
t4 = 0
t5 = 0
t6 = 0
Next n
Text1.Text = Text1.Text & vbCrLf
Next m

```

```

If Not cWaveTTS1.IsTTSSpeaking Then
    'Set the output device (sound-card, modems, etc...)
    cWaveTTS1.Voice_Output = 0

    'Set the voice rate (-10 to 10)
    cWaveTTS1.Voice_Rate = -1

    'Set the voice volume (0 to 100)
    cWaveTTS1.Voice_Volume = HScroll1.Value

End If
cWaveTTS1.Speak Text1.Text

Command2.enabled = True
End Sub

Private Sub Command3_Click()
CommonDialog2.Filter = "Bitmap (*.BMP) | *.bmp"

CommonDialog2.ShowSave

SavePicture Picture2.Image, CommonDialog2.fileName
End Sub

Private Sub Form_Load()
cWaveTTS1.Init "Trail Mode."
cWaveTTS1.GetFormats
HScroll1.Value = 0
End Sub

Private Sub Text1_Change()

End Sub

Private Sub Command4_Click()
Command4.enabled = False

```

```

Text1.Text = ""
t1 = 0
t2 = 0
t3 = 0
t4 = 0
t5 = 0
t6 = 0
hanya_angka = False
For m = 0 To 2
For n = 0 To 4
bki = n * 90
bka = bki + 90
ba = m * 90
bbw = ba + 90
For j = ba To bbw
For i = bki To bka
a0 = Picture1.Point(i, j)
r1 = a0 And RGB(255, 0, 0)

g1 = (a0 And RGB(0, 255, 0)) \ 256
b1 = (a0 And RGB(0, 0, 255)) \ 256 \ 256
grey = (r1 + g1 + b1) / 3

If ((j > ba + 5) And (j < ba + 25)) And ((i > bki + 5)
And (i < bki + 35)) Then
    If ((grey < 64)) Then
        t1 = t1 + 1
    End If
End If

If (j > ba + 35) And (j < ba + 55) And ((i > bki + 5)
And (i < bki + 35)) Then
    If ((grey < 64)) Then
        t2 = t2 + 1
    End If

```

```

        End If

If (j > ba + 65) And (j < ba + 85) And ((i > bki + 5)
And (i < bki + 35)) Then
    If ((grey < 64)) Then
        t3 = t3 + 1
    End If
End If

If ((j > ba + 5) And (j < ba + 25)) And (i > bki + 50)
And (i < bki + 85) Then
    If ((grey < 64)) Then
        t4 = t4 + 1
    End If
End If

If (j > ba + 35) And (j < ba + 55) And ((i > bki + 50)
And (i < bki + 85)) Then
    If ((grey < 64)) Then
        t5 = t5 + 1
    End If
End If

If (j > ba + 65) And (j < ba + 85) And ((i > bki + 50)
And (i < bki + 85)) Then
    If ((grey < 64)) Then
        t6 = t6 + 1
    End If
End If

Next i
Next j

If (t1 >= 100) Then
    t1 = 1
Else: t1 = 0
End If

```

```

If (t2 >= 100) Then
t2 = 2
Else: t2 = 0
End If

If (t3 >= 100) Then
t3 = 4
Else: t3 = 0
End If

If (t4 >= 100) Then
t4 = 8
Else: t4 = 0
End If

If (t5 >= 100) Then
t5 = 16
Else: t5 = 0
End If

If (t6 >= 100) Then
t6 = 32
Else: t6 = 0
End If

angka =Trim(Str(t1 + t2 + t3 + t4 + t5 + t6))

If (angka = "60" Or hanya_angka = True) Then
    hanya_angka = True
    Call Tampil2
Else
    Call Tampil
End If

```

```

t1 = 0
t2 = 0
t3 = 0
t4 = 0
t5 = 0
t6 = 0
Next n
Text1.Text = Text1.Text & vbCrLf
Next m

If Not cWaveTTS1.IsTTSSpeaking Then

    'Set the output device (sound-card, modems,
etc...)
    cWaveTTS1.Voice_Output = 0

    'Set the selected voice from the cboVoices
    cWaveTTS1.Voice_Index = 0

    'Set the voice rate (-10 to 10)
    cWaveTTS1.Voice_Rate = -1

    'Set the voice volume (0 to 100)
    cWaveTTS1.Voice_Volume = HScroll1.Value
End If
cWaveTTS1.Speak Text1.Text

Command4.enabled = True
End Sub

Private Sub Form_Load()
cWaveTTS1.Init "Trail Mode."
cWaveTTS1.GetFormats
HScroll1.Value = 0

```

```

End Sub

Public Sub Tampil2()
    db(1, 1) = "1"
    db(1, 2) = "1"
    db(2, 1) = "3"
    db(2, 2) = "2"
    db(3, 1) = "9"
    db(3, 2) = "3"
    db(4, 1) = "25"
    db(4, 2) = "4"
    db(5, 1) = "17"
    db(5, 2) = "5"
    db(6, 1) = "11"
    db(6, 2) = "6"
    db(7, 1) = "27"
    db(7, 2) = "7"
    db(8, 1) = "19"
    db(8, 2) = "8"
    db(9, 1) = "10"
    db(9, 2) = "9"
    db(10, 1) = "26"
    db(10, 2) = "0"
    db(11, 1) = "60"
    db(11, 2) = "hanya_angka"
    i = 1
    While (angka <> db(i, 1) And i <= 11)
        i = i + 1
    Wend
    Text1.Text = Text1.Text + db(i, 2) + " "
End Sub

```

LAMPIRAN B
LISTING PROGRAM MODUL EZTWAIN

Listing Program Class Module Eztwain.

```
Declare Sub TWAIN_LogFile Lib "Eztwain3.dll" (ByVal fLog As Long)
    void TWAIN_LogFile(int fLog)
' Turn logging eztwain.log on or off.
' By default the log file is written to C:\ but this
' can be overridden, see TWAIN_SetLogFolder below.
' fLog = 0      close log file and turn off logging
' The following flags can be combined to enable logging:
' 1            basic logging of TWAIN and EZTwain operations.
' 2            flush log constantly (use if EZTwain crashes)
' 4            log Windows messages flowing through EZTwain
Global Const EZT_LOG_ON = 1
Global Const EZT_LOG_FLUSH = 2
Global Const EZT_LOG_DETAIL = 4
```

By default, the default data source (DS) is opened, displays its dialog,

```
' and determines all the parameters of the acquisition and transfer.
' If you want to (try to) hide the DS dialog, see TWAIN_SetHideUI.
' To set acquisition parameters, you need to do something like this:
'     TWAIN_OpenDefaultSource() -or- TWAIN_OpenSource(sourceName)
'     TWAIN_Set*           - one or more capability-setting functions
'     hdib = TWAIN_Acquire(hwnd)
'     if (hdib) then ... process image, TWAIN_FreeNative(hdib); end
TWAIN_SetHideUI(int fHide)
```

```
Declare Sub TWAIN_SetFileAppendFlag Lib "Eztwain3.dll" (ByVal bAppend
As Long)
Declare Function TWAIN_GetFileAppendFlag Lib "Eztwain3.dll" () As Long
    int TWAIN_SetIndicators(BOOL bVisible)
```

```

' Set or get the File Append Flag.
' When this flag is non-zero and EZTwain writes to an existing TIFF,
    PDF or DCX
' file, the new images are *appended* to the existing file.
' When this flag is False (0), writing to any existing file replaces
    the file.
' The default state of this flag is: False (0).

```

```

Declare Sub TWAIN_SetJpegQuality Lib "Eztwain3.dll" (ByVal nQ As Long)
Declare Function TWAIN_GetJpegQuality Lib "Eztwain3.dll" () As Long

    void TWAIN_SetJpegQuality(int nQ)
' Set the 'quality' of subsequently saved JPEG/JFIF image files.
' nQ = 100 is maximum quality & minimum compression.
' nQ = 75 is 'good' quality, the default.
' nQ = 1 is minimum quality & maximum compression.

    void TWAIN_SetJpegQuality(int nQ)

Declare Function TWAIN_OpenSourceManager Lib "Eztwain3.dll" (ByVal
    hwnd As Long) As Long
    int TWAIN_OpenSource(string pzName)
' Opens the Data Source Manager, if not already open.
' If the Source Manager is already open, does nothing and returns
    TRUE.
' This call will fail if the Source Manager is not loaded.

Declare Function TWAIN_SetXferCount Lib "Eztwain3.dll" (ByVal nXfers
    As Long) As Long
    int TWAIN_SetXferCount(int nXfers)

```

```

' Negotiate with open Source the number of images application will
    accept.
' nXfers = -1 means any number
' Returns: TRUE(1) for success, FALSE(0) for failure.
Declare Function TWAIN_Testing123 Lib "EztwainCall"
    TWAIN_AcquireToFilename3.dll" (ByVal s As String, ByVal n As
    Long, ByVal h As Long, ByVal d As Double, ByVal u As Long) As
    Long

    Int Twain_ArquireToFilename(HWND hwndApp, string pszFile)

' Displays a dialog box showing the parameter values received by the
    function.
' Pass in any valid values for the parameters - if they are faithfully
' displayed in the dialog box when you call this function, then
    parameter
' passing from your program to EZTwain is probably working correctly.

```

Return values:

```

' 0 success
' -1 the Acquire failed, or the device closed or quit after 0 pages.
' If 0 pages were written but no other error was diagnosed,
' TWAIN_LastErrorCode will be EZTEC_0_PAGES.

```

```

Declare Function DIB_LoadArrayFromFilename Lib "Eztwain3.dll" (ByRef
    ahDIB As Long, ByVal nMax As Long, ByVal sFileName As String) As
    Long

```

```

int TWAIN_LastErrorCode(void)

' Load up to nMax images as DIBs into an array, reading from the
    specified file.
' If filename is null or the empty string, the user is prompted to
    select a file.

```

```
' If the user is prompted and cancels, this function returns -10.  
' Otherwise if successful it returns the number of pages (images)  
loaded.  
' Otherwise it returns -1 and you should call TWAIN_ReportLastError,  
TWAIN_LastErrorCode,etc.  
void TWAIN_ReportLastError(string pzMsg)
```

LAMPIRAN C
LISTING PROGRAM WAVE TTS ACTIVEX

Listing Program Wave Tts ActiveX.

```
'Save the text on the text-box to a wave file.

'Set the output device (sound-card, modems, etc...)
cWaveTTS1.Voice_Output = cboAudioOutputs.ListIndex

'Set the voice rate
cWaveTTS1.Voice_Rate = 0

'Set the voice volume
cWaveTTS1.Voice_Volume = 100

End If

End Sub

'Speak the text on the text-box.

'Check if already speak
If Not cWaveTTS1.IsTTSSpeaking Then

    'Set the output device (sound-card, modems, etc...)
    cWaveTTS1.Voice_Output = cboAudioOutputs.ListIndex

    'Set the voice rate (-10 to 10)
    cWaveTTS1.Voice_Rate = sldRate.Value

    'Set the voice volume (0 to 100)
    cWaveTTS1.Voice_Volume = sldVolume.Value

End If

'Speak it
cWaveTTS1.Speak Text1.Text

Command2.enabled = True

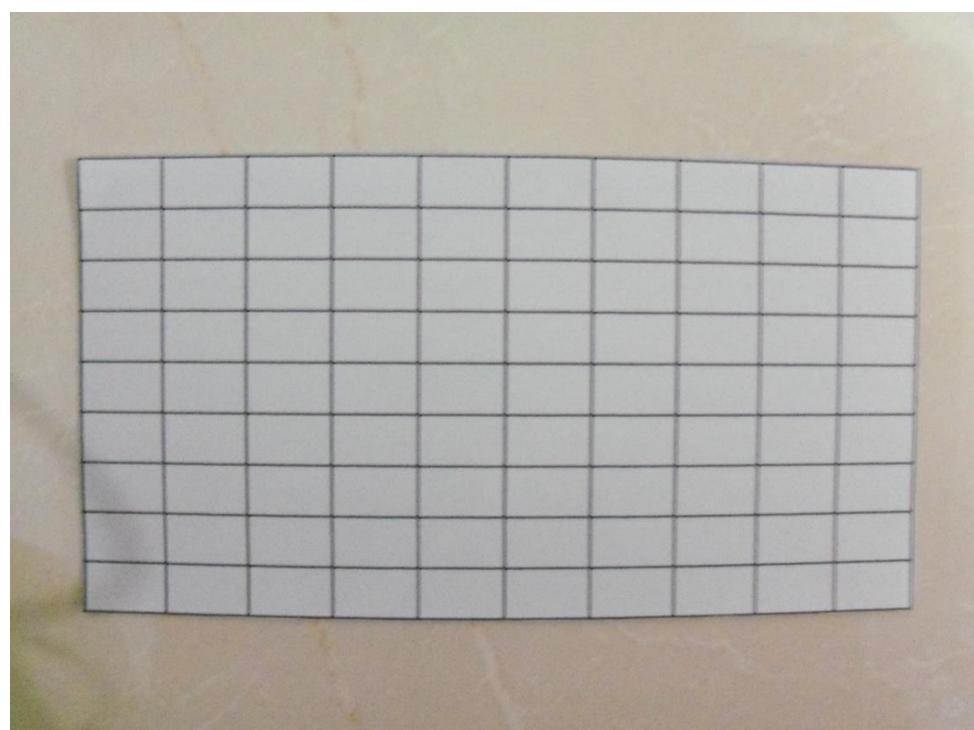
End Sub
```

LAMPIRAN D
GAMBAR HURUF *BRAILLE*

Pengenalan huruf *braille*.

●	●	●	●	●	●	●	●	●	●	●	●	●	●
A	B	C	D	E	F	G	H	I	J				
●	●	●	●	●	●	●	●	●	●				
K	L	M	N	O	P	Q	R	S	T				
●	●	●	●	●	●	●	●						
U	V	W	X	Y	Z					+	-		
●	●	●	●	●	●					●	●		
,	:	.	Majemuk	!	:	huruf tebal	Huruf besar	/	masuk angka				
●	●	●	●	●	●	●	●	●	●	●	●		
1	2	3	4	5	6	7	8	9	0				

Formulir huruf *braille*:



LAMPIRAN E
DATABASE HURUF *BRAILLE*

Database huruf *braille*.

Angka Akumulasi	Abjad
1	a
3	b
9	c
25	d
17	e
11	f
27	g
19	h
10	i
26	j
5	k
7	l
13	m
29	n
21	o
15	p
31	q
23	r
14	s
30	t
37	u
39	v
58	w
45	x
61	y
53	z
60	Masuk angka
2	,
6	;
50	.
36	Majemuk
22	!
18	:
40	Huruf tebal

32	Huruf besar
12	/
20	-
34	+