LAMPIRAN A

PROGRAM SEGMENTASI DATA, MENGHITUNG NILAI ENERGI, DAN NORMALISASI NILAI ENERGI

Data MLII, V1
Segmentasi s ectopy subyek 1

```
clear
clc
%supraventricular 101
load sve101.txt
%m
m=sve101(1:21600,2);
%v
v=sve101(1:21600,3);

%pengsegmenan MLII
m1=m(1:900);
m2=m(901:1800);
m3=m(1801:2700);
m4=m(2701:3600);
m5=m(3601:4500);
m6=m(4501:5400);
m7=m(5401:6300);
m8=m(6301:7200);
m9=m(7201:8100);
m10=m(8101:9000);

m11=m(9001:9900);
m12=m(9901:10800);
m13=m(10801:11700);
m14=m(11701:12600);
m15=m(12601:13500);
m16=m(13501:14400);
m17=m(14401:15300);
m18=m(15301:16200);
m19=m(16201:17100);
m20=m(17101:18000);

%pengsegmenan V1
v1=v(1:900);
v2=v(901:1800);
v3=v(1801:2700);
v4=v(2701:3600);
v5=v(3601:4500);
v6=v(4501:5400);
v7=v(5401:6300);
v8=v(6301:7200);
v9=v(7201:8100);
v10=v(8101:9000);

v11=v(9001:9900);
v12=v(9901:10800);
v13=v(10801:11700);
v14=v(11701:12600);
v15=v(12601:13500);
v16=v(13501:14400);
v17=v(14401:15300);
v18=v(15301:16200);
v19=v(16201:17100);
v20=v(17101:18000);

%energi MLII 10 segmen pertama
[c1,l1]=wavedec(m1,3,'db5');
[ea1,ed1]=wenergy(c1,l1);
[c2,l2]=wavedec(m2,3,'db5');
[ea2,ed2]=wenergy(c2,l2);
[c3,l3]=wavedec(m3,3,'db5');
[ea3,ed3]=wenergy(c3,l3);
[c4,l4]=wavedec(m4,3,'db5');
[ea4,ed4]=wenergy(c4,l4);
[c5,l5]=wavedec(m5,3,'db5');
[ea5,ed5]=wenergy(c5,l5);
[c6,l6]=wavedec(m6,3,'db5');
[ea6,ed6]=wenergy(c6,l6);
[c7,l7]=wavedec(m7,3,'db5');
[ea7,ed7]=wenergy(c7,l7);
[c8,l8]=wavedec(m8,3,'db5');
[ea8,ed8]=wenergy(c8,l8);
[c9,l9]=wavedec(m9,3,'db5');
[ea9,ed9]=wenergy(c9,l9);
[c10,l10]=wavedec(m10,3,'db5');
[ea10,ed10]=wenergy(c10,l10);

%energi MLII 10 segmen kedua
[c11,l11]=wavedec(m11,3,'db5');
[ea11,ed11]=wenergy(c11,l11);
[c12,l12]=wavedec(m12,3,'db5');
[ea12,ed12]=wenergy(c12,l12);
[c13,l13]=wavedec(m13,3,'db5');
[ea13,ed13]=wenergy(c13,l13);
[c14,l14]=wavedec(m14,3,'db5');
[ea14,ed14]=wenergy(c14,l14);
[c15,l15]=wavedec(m15,3,'db5');
[ea15,ed15]=wenergy(c15,l15);
[c16,l16]=wavedec(m16,3,'db5');
[ea16,ed16]=wenergy(c16,l16);
[c17,l17]=wavedec(m17,3,'db5');
[ea17,ed17]=wenergy(c17,l17);
[c18,l18]=wavedec(m18,3,'db5');
[ea18,ed18]=wenergy(c18,l18);
[c19,l19]=wavedec(m19,3,'db5');
[ea19,ed19]=wenergy(c19,l19);
[c20,l20]=wavedec(m20,3,'db5');
[ea20,ed20]=wenergy(c20,l20);

%energi V1 10 segmen pertama
[c51,l51]=wavedec(v1,3,'db5');
[ea51,ed51]=wenergy(c51,l51);
[c52,l52]=wavedec(v2,3,'db5');
[ea52,ed52]=wenergy(c52,l52);
[c53,l53]=wavedec(v3,3,'db5');
[ea53,ed53]=wenergy(c53,l53);
[c54,l54]=wavedec(v4,3,'db5');
[ea54,ed54]=wenergy(c54,l54);
[c55,l55]=wavedec(v5,3,'db5');
[ea55,ed55]=wenergy(c55,l55);
[c56,l56]=wavedec(v6,3,'db5');
[ea56,ed56]=wenergy(c56,l56);
[c57,l57]=wavedec(v7,3,'db5');
[ea57,ed57]=wenergy(c57,l57);
[c58,l58]=wavedec(v8,3,'db5');
[ea58,ed58]=wenergy(c58,l58);
[c59,l59]=wavedec(v9,3,'db5');
[ea59,ed59]=wenergy(c59,l59);
[c60,l60]=wavedec(v10,3,'db5');
[ea60,ed60]=wenergy(c60,l60);

%energi V1 10 segmen kedua
[c61,l61]=wavedec(v11,3,'db5');
[ea61,ed61]=wenergy(c61,l61);
```

```
[c62,l62]=wavedec(v12,3,'db5');
[ea62,ed62]=wenergy(c62,l62);
[c63,l63]=wavedec(v13,3,'db5');
[ea63,ed63]=wenergy(c63,l63);
[c64,l64]=wavedec(v14,3,'db5');
[ea64,ed64]=wenergy(c64,l64);
[c65,l65]=wavedec(v15,3,'db5');
[ea65,ed65]=wenergy(c65,l65);
[c66,l66]=wavedec(v16,3,'db5');
[ea66,ed66]=wenergy(c66,l66);
[c67,l67]=wavedec(v17,3,'db5');
[ea67,ed67]=wenergy(c67,l67);
[c68,l68]=wavedec(v18,3,'db5');
[ea68,ed68]=wenergy(c68,l68);
[c69,l69]=wavedec(v19,3,'db5');
[ea69,ed69]=wenergy(c69,l69);
[c70,l70]=wavedec(v20,3,'db5');
[ea70,ed70]=wenergy(c70,l70);

%penggabungan nilai energi
%penggabungan nilai energi MLII
sme1=[ea1,ed1]';
sme2=[ea2,ed2]';
sme3=[ea3,ed3]';
sme4=[ea4,ed4]';
sme5=[ea5,ed5]';
sme6=[ea6,ed6]';
sme7=[ea7,ed7]';
sme8=[ea8,ed8]';
sme9=[ea9,ed9]';
sme10=[ea10,ed10]';

sme11=[ea11,ed11]';
sme12=[ea12,ed12]';
sme13=[ea13,ed13]';
sme14=[ea14,ed14]';
sme15=[ea15,ed15]';
sme16=[ea16,ed16]';
sme17=[ea17,ed17]';
sme18=[ea18,ed18]';
sme19=[ea19,ed19]';
sme20=[ea20,ed20]';

%penggabungan nilai energi v1
sve1=[ea51,ed51]';
sve2=[ea52,ed52]';
sve3=[ea53,ed53]';
sve4=[ea54,ed54]';
sve5=[ea55,ed55]';
sve6=[ea56,ed56]';
sve7=[ea57,ed57]';
sve8=[ea58,ed58]';
sve9=[ea59,ed59]';
sve10=[ea60,ed60]';

sve11=[ea61,ed61]';
sve12=[ea62,ed62]';
sve13=[ea63,ed63]';
sve14=[ea64,ed64]';
sve15=[ea65,ed65]';
sve16=[ea66,ed66]';
sve17=[ea67,ed67]';
sve18=[ea68,ed68]';
sve19=[ea69,ed69]';
sve20=[ea70,ed70]';

%save data energi
save data_supra_a sme1 sme2 sme3 sme4 sme5
sme6 sme7 sme8 sme9 sme10 sme11 sme12
sme13 sme14 sme15 sme16 sme17 sme18 sme19
sme20  sve1 sve2 sve3 sve4 sve5 sve6 sve7 sve8
sve9 sve10 sve11 sve12 sve13 sve14 sve15 sve16
sve17 sve18 sve19 sve20

%normalisasi
%normalisasi energi MLII
nsm1_a=normc(sme1);
nsm2_a=normc(sme2);
nsm3_a=normc(sme3);
nsm4_a=normc(sme4);
nsm5_a=normc(sme5);
nsm6_a=normc(sme6);
nsm7_a=normc(sme7);
nsm8_a=normc(sme8);
nsm9_a=normc(sme9);
nsm10_a=normc(sme10);

nsm11_a=normc(sme11);
nsm12_a=normc(sme12);
nsm13_a=normc(sme13);
nsm14_a=normc(sme14);
nsm15_a=normc(sme15);
nsm16_a=normc(sme16);
nsm17_a=normc(sme17);
nsm18_a=normc(sme18);
nsm19_a=normc(sme19);
nsm20_a=normc(sme20);

%normalisasi energi V1
nsv1_a=normc(sve1);
nsv2_a=normc(sve2);
nsv3_a=normc(sve3);
nsv4_a=normc(sve4);
nsv5_a=normc(sve5);
nsv6_a=normc(sve6);
nsv7_a=normc(sve7);
nsv8_a=normc(sve8);
nsv9_a=normc(sve9);
nsv10_a=normc(sve10);

nsv11_a=normc(sve11);
nsv12_a=normc(sve12);
nsv13_a=normc(sve13);
nsv14_a=normc(sve14);
nsv15_a=normc(sve15);
nsv16_a=normc(sve16);
nsv17_a=normc(sve17);
nsv18_a=normc(sve18);
nsv19_a=normc(sve19);
nsv20_a=normc(sve20);

%save data energi ternormalisasi
save norm_supra_a  nsm1_a nsm2_a nsm3_a
nsm4_a nsm5_a nsm6_a nsm7_a nsm8_a nsm9_a
nsm10_a nsm11_a nsm12_a nsm13_a nsm14_a
nsm15_a nsm16_a nsm17_a nsm18_a nsm19_a
```

```
nsm20_a nsv1_a nsv2_a nsv3_a nsv4_a nsv5_a
nsv6_a nsv7_a nsv8_a nsv9_a nsv10_a nsv11_a
nsv12_a nsv13_a nsv14_a nsv15_a nsv16_a
nsv17_a nsv18_a nsv19_a nsv20_a
```

Segmentasi s ectopy subyek 7

```
clear
clc
%supraventricular 232
load sve232.txt
%m
m=sve232(1:21600,2);
%v
v=sve232(1:21600,3);

%pengsegmenan MLII
m1=m(1:900);
m2=m(901:1800);
m3=m(1801:2700);
m4=m(2701:3600);
m5=m(3601:4500);
m6=m(4501:5400);
m7=m(5401:6300);
m8=m(6301:7200);
m9=m(7201:8100);
m10=m(8101:9000);

m11=m(9001:9900);
m12=m(9901:10800);
m13=m(10801:11700);
m14=m(11701:12600);
m15=m(12601:13500);
m16=m(13501:14400);
m17=m(14401:15300);
m18=m(15301:16200);
m19=m(16201:17100);
m20=m(17101:18000);

%pengsegmenan V1
v1=v(1:900);
v2=v(901:1800);
v3=v(1801:2700);
v4=v(2701:3600);
v5=v(3601:4500);
v6=v(4501:5400);
v7=v(5401:6300);
v8=v(6301:7200);
v9=v(7201:8100);
v10=v(8101:9000);

v11=v(9001:9900);
v12=v(9901:10800);
v13=v(10801:11700);
v14=v(11701:12600);
v15=v(12601:13500);
v16=v(13501:14400);
v17=v(14401:15300);
v18=v(15301:16200);
v19=v(16201:17100);
v20=v(17101:18000);

%energi MLII 10 segmen pertama
[c1,l1]=wavedec(m1,3,'db5');
[ea1,ed1]=wenergy(c1,l1);
[c2,l2]=wavedec(m2,3,'db5');
[ea2,ed2]=wenergy(c2,l2);
[c3,l3]=wavedec(m3,3,'db5');
[ea3,ed3]=wenergy(c3,l3);
[c4,l4]=wavedec(m4,3,'db5');
[ea4,ed4]=wenergy(c4,l4);
[c5,l5]=wavedec(m5,3,'db5');
[ea5,ed5]=wenergy(c5,l5);
[c6,l6]=wavedec(m6,3,'db5');
[ea6,ed6]=wenergy(c6,l6);
[c7,l7]=wavedec(m7,3,'db5');
[ea7,ed7]=wenergy(c7,l7);
[c8,l8]=wavedec(m8,3,'db5');
[ea8,ed8]=wenergy(c8,l8);
[c9,l9]=wavedec(m9,3,'db5');
[ea9,ed9]=wenergy(c9,l9);
[c10,l10]=wavedec(m10,3,'db5');
[ea10,ed10]=wenergy(c10,l10);

%energi MLII 10 segmen kedua
[c11,l11]=wavedec(m11,3,'db5');
[ea11,ed11]=wenergy(c11,l11);
[c12,l12]=wavedec(m12,3,'db5');
[ea12,ed12]=wenergy(c12,l12);
[c13,l13]=wavedec(m13,3,'db5');
[ea13,ed13]=wenergy(c13,l13);
[c14,l14]=wavedec(m14,3,'db5');
[ea14,ed14]=wenergy(c14,l14);
[c15,l15]=wavedec(m15,3,'db5');
[ea15,ed15]=wenergy(c15,l15);
[c16,l16]=wavedec(m16,3,'db5');
[ea16,ed16]=wenergy(c16,l16);
[c17,l17]=wavedec(m17,3,'db5');
[ea17,ed17]=wenergy(c17,l17);
[c18,l18]=wavedec(m18,3,'db5');
[ea18,ed18]=wenergy(c18,l18);
[c19,l19]=wavedec(m19,3,'db5');
[ea19,ed19]=wenergy(c19,l19);
[c20,l20]=wavedec(m20,3,'db5');
[ea20,ed20]=wenergy(c20,l20);

%energi V1 10 segmen pertama
[c51,l51]=wavedec(v1,3,'db5');
[ea51,ed51]=wenergy(c51,l51);
[c52,l52]=wavedec(v2,3,'db5');
[ea52,ed52]=wenergy(c52,l52);
[c53,l53]=wavedec(v3,3,'db5');
[ea53,ed53]=wenergy(c53,l53);
[c54,l54]=wavedec(v4,3,'db5');
[ea54,ed54]=wenergy(c54,l54);
[c55,l55]=wavedec(v5,3,'db5');
[ea55,ed55]=wenergy(c55,l55);
[c56,l56]=wavedec(v6,3,'db5');
[ea56,ed56]=wenergy(c56,l56);
[c57,l57]=wavedec(v7,3,'db5');
[ea57,ed57]=wenergy(c57,l57);
[c58,l58]=wavedec(v8,3,'db5');
[ea58,ed58]=wenergy(c58,l58);
[c59,l59]=wavedec(v9,3,'db5');
[ea59,ed59]=wenergy(c59,l59);
[c60,l60]=wavedec(v10,3,'db5');
```

```
[ea60,ed60]=wenergy(c60,l60);

%energi V1 10 segmen kedua
[c61,l61]=wavedec(v11,3,'db5');
[ea61,ed61]=wenergy(c61,l61);
[c62,l62]=wavedec(v12,3,'db5');
[ea62,ed62]=wenergy(c62,l62);
[c63,l63]=wavedec(v13,3,'db5');
[ea63,ed63]=wenergy(c63,l63);
[c64,l64]=wavedec(v14,3,'db5');
[ea64,ed64]=wenergy(c64,l64);
[c65,l65]=wavedec(v15,3,'db5');
[ea65,ed65]=wenergy(c65,l65);
[c66,l66]=wavedec(v16,3,'db5');
[ea66,ed66]=wenergy(c66,l66);
[c67,l67]=wavedec(v17,3,'db5');
[ea67,ed67]=wenergy(c67,l67);
[c68,l68]=wavedec(v18,3,'db5');
[ea68,ed68]=wenergy(c68,l68);
[c69,l69]=wavedec(v19,3,'db5');
[ea69,ed69]=wenergy(c69,l69);
[c70,l70]=wavedec(v20,3,'db5');
[ea70,ed70]=wenergy(c70,l70);

%penggabungan nilai energi
%penggabungan nilai energi MLII
sme1=[ea1,ed1]';
sme2=[ea2,ed2]';
sme3=[ea3,ed3]';
sme4=[ea4,ed4]';
sme5=[ea5,ed5]';
sme6=[ea6,ed6]';
sme7=[ea7,ed7]';
sme8=[ea8,ed8]';
sme9=[ea9,ed9]';
sme10=[ea10,ed10]';

sme11=[ea11,ed11]';
sme12=[ea12,ed12]';
sme13=[ea13,ed13]';
sme14=[ea14,ed14]';
sme15=[ea15,ed15]';
sme16=[ea16,ed16]';
sme17=[ea17,ed17]';
sme18=[ea18,ed18]';
sme19=[ea19,ed19]';
sme20=[ea20,ed20]';

%penggabungan nilai energi v1
sve1=[ea51,ed51]';
sve2=[ea52,ed52]';
sve3=[ea53,ed53]';
sve4=[ea54,ed54]';
sve5=[ea55,ed55]';
sve6=[ea56,ed56]';
sve7=[ea57,ed57]';
sve8=[ea58,ed58]';
sve9=[ea59,ed59]';
sve10=[ea60,ed60]';

sve11=[ea61,ed61]';
sve12=[ea62,ed62]';
sve13=[ea63,ed63]';
sve14=[ea64,ed64]';
sve15=[ea65,ed65]';
sve16=[ea66,ed66]';
sve17=[ea67,ed67]';
sve18=[ea68,ed68]';
sve19=[ea69,ed69]';
sve20=[ea70,ed70]';

%save data energi
save data_supra_g sme1 sme2 sme3 sme4 sme5
sme6 sme7 sme8 sme9 sme10 sme11 sme12
sme13 sme14 sme15 sme16 sme17 sme18 sme19
sme20 sve1 sve2 sve3 sve4 sve5 sve6 sve7 sve8
sve9 sve10 sve11 sve12 sve13 sve14 sve15 sve16
sve17 sve18 sve19 sve20

%normalisasi
%normalisasi energi MLII
nsm1_g=normc(sme1);
nsm2_g=normc(sme2);
nsm3_g=normc(sme3);
nsm4_g=normc(sme4);
nsm5_g=normc(sme5);
nsm6_g=normc(sme6);
nsm7_g=normc(sme7);
nsm8_g=normc(sme8);
nsm9_g=normc(sme9);
nsm10_g=normc(sme10);

nsm11_g=normc(sme11);
nsm12_g=normc(sme12);
nsm13_g=normc(sme13);
nsm14_g=normc(sme14);
nsm15_g=normc(sme15);
nsm16_g=normc(sme16);
nsm17_g=normc(sme17);
nsm18_g=normc(sme18);
nsm19_g=normc(sme19);
nsm20_g=normc(sme20);

%normalisasi energi V1
nsv1_g=normc(sve1);
nsv2_g=normc(sve2);
nsv3_g=normc(sve3);
nsv4_g=normc(sve4);
nsv5_g=normc(sve5);
nsv6_g=normc(sve6);
nsv7_g=normc(sve7);
nsv8_g=normc(sve8);
nsv9_g=normc(sve9);
nsv10_g=normc(sve10);

nsv11_g=normc(sve11);
nsv12_g=normc(sve12);
nsv13_g=normc(sve13);
nsv14_g=normc(sve14);
nsv15_g=normc(sve15);
nsv16_g=normc(sve16);
nsv17_g=normc(sve17);
nsv18_g=normc(sve18);
nsv19_g=normc(sve19);
nsv20_g=normc(sve20);
```

```
%save data energi ternormalisasi
save norm_supra_g nsm1_g nsm2_g nsm3_g
nsm4_g nsm5_g nsm6_g nsm7_g nsm8_g
nsm9_g nsm10_g nsm11_g nsm12_g nsm13_g
nsm14_g nsm15_g nsm16_g nsm17_g nsm18_g
nsm19_g nsm20_g nsv1_g nsv2_g nsv3_g
nsv4_g nsv5_g nsv6_g nsv7_g nsv8_g nsv9_g
nsv10_g nsv11_g nsv12_g nsv13_g nsv14_g
nsv15_g nsv16_g nsv17_g nsv18_g nsv19_g
nsv20_g
```

Segmentasi v ectopy subyek 1

```
clear
clc
%ventricular 105
load ve105.txt
%m
m=ve105(1:21600,2);
%v
v=ve105(1:21600,3);

%pengsegmenan MLII
m1=m(1:900);
m2=m(901:1800);
m3=m(1801:2700);
m4=m(2701:3600);
m5=m(3601:4500);
m6=m(4501:5400);
m7=m(5401:6300);
m8=m(6301:7200);
m9=m(7201:8100);
m10=m(8101:9000);

m11=m(9001:9900);
m12=m(9901:10800);
m13=m(10801:11700);
m14=m(11701:12600);
m15=m(12601:13500);
m16=m(13501:14400);
m17=m(14401:15300);
m18=m(15301:16200);
m19=m(16201:17100);
m20=m(17101:18000);

%pengsegmenan V1
v1=v(1:900);
v2=v(901:1800);
v3=v(1801:2700);
v4=v(2701:3600);
v5=v(3601:4500);
v6=v(4501:5400);
v7=v(5401:6300);
v8=v(6301:7200);
v9=v(7201:8100);
v10=v(8101:9000);

v11=v(9001:9900);
v12=v(9901:10800);
v13=v(10801:11700);
v14=v(11701:12600);
v15=v(12601:13500);
v16=v(13501:14400);
v17=v(14401:15300);
v18=v(15301:16200);
v19=v(16201:17100);
v20=v(17101:18000);

%energi MLII 10 segmen pertama
[c1,l1]=wavedec(m1,3,'db5');
[ea1,ed1]=wenergy(c1,l1);
[c2,l2]=wavedec(m2,3,'db5');
[ea2,ed2]=wenergy(c2,l2);
[c3,l3]=wavedec(m3,3,'db5');
[ea3,ed3]=wenergy(c3,l3);
[c4,l4]=wavedec(m4,3,'db5');
[ea4,ed4]=wenergy(c4,l4);
[c5,l5]=wavedec(m5,3,'db5');
[ea5,ed5]=wenergy(c5,l5);
[c6,l6]=wavedec(m6,3,'db5');
[ea6,ed6]=wenergy(c6,l6);
[c7,l7]=wavedec(m7,3,'db5');
[ea7,ed7]=wenergy(c7,l7);
[c8,l8]=wavedec(m8,3,'db5');
[ea8,ed8]=wenergy(c8,l8);
[c9,l9]=wavedec(m9,3,'db5');
[ea9,ed9]=wenergy(c9,l9);
[c10,l10]=wavedec(m10,3,'db5');
[ea10,ed10]=wenergy(c10,l10);

%energi MLII 10 segmen kedua
[c11,l11]=wavedec(m11,3,'db5');
[ea11,ed11]=wenergy(c11,l11);
[c12,l12]=wavedec(m12,3,'db5');
[ea12,ed12]=wenergy(c12,l12);
[c13,l13]=wavedec(m13,3,'db5');
[ea13,ed13]=wenergy(c13,l13);
[c14,l14]=wavedec(m14,3,'db5');
[ea14,ed14]=wenergy(c14,l14);
[c15,l15]=wavedec(m15,3,'db5');
[ea15,ed15]=wenergy(c15,l15);
[c16,l16]=wavedec(m16,3,'db5');
[ea16,ed16]=wenergy(c16,l16);
[c17,l17]=wavedec(m17,3,'db5');
[ea17,ed17]=wenergy(c17,l17);
[c18,l18]=wavedec(m18,3,'db5');
[ea18,ed18]=wenergy(c18,l18);
[c19,l19]=wavedec(m19,3,'db5');
[ea19,ed19]=wenergy(c19,l19);
[c20,l20]=wavedec(m20,3,'db5');
[ea20,ed20]=wenergy(c20,l20);

%energi V1 10 segmen pertama
[c51,l51]=wavedec(v1,3,'db5');
[ea51,ed51]=wenergy(c51,l51);
[c52,l52]=wavedec(v2,3,'db5');
[ea52,ed52]=wenergy(c52,l52);
[c53,l53]=wavedec(v3,3,'db5');
[ea53,ed53]=wenergy(c53,l53);
[c54,l54]=wavedec(v4,3,'db5');
[ea54,ed54]=wenergy(c54,l54);
[c55,l55]=wavedec(v5,3,'db5');
[ea55,ed55]=wenergy(c55,l55);
[c56,l56]=wavedec(v6,3,'db5');
[ea56,ed56]=wenergy(c56,l56);
[c57,l57]=wavedec(v7,3,'db5');
```

```
[ea57,ed57]=wenergy(c57,l57);
[c58,l58]=wavedec(v8,3,'db5');
[ea58,ed58]=wenergy(c58,l58);
[c59,l59]=wavedec(v9,3,'db5');
[ea59,ed59]=wenergy(c59,l59);
[c60,l60]=wavedec(v10,3,'db5');
[ea60,ed60]=wenergy(c60,l60);

%energi V1 10 segmen kedua
[c61,l61]=wavedec(v11,3,'db5');
[ea61,ed61]=wenergy(c61,l61);
[c62,l62]=wavedec(v12,3,'db5');
[ea62,ed62]=wenergy(c62,l62);
[c63,l63]=wavedec(v13,3,'db5');
[ea63,ed63]=wenergy(c63,l63);
[c64,l64]=wavedec(v14,3,'db5');
[ea64,ed64]=wenergy(c64,l64);
[c65,l65]=wavedec(v15,3,'db5');
[ea65,ed65]=wenergy(c65,l65);
[c66,l66]=wavedec(v16,3,'db5');
[ea66,ed66]=wenergy(c66,l66);
[c67,l67]=wavedec(v17,3,'db5');
[ea67,ed67]=wenergy(c67,l67);
[c68,l68]=wavedec(v18,3,'db5');
[ea68,ed68]=wenergy(c68,l68);
[c69,l69]=wavedec(v19,3,'db5');
[ea69,ed69]=wenergy(c69,l69);
[c70,l70]=wavedec(v20,3,'db5');
[ea70,ed70]=wenergy(c70,l70);

%penggabungan nilai energi
%penggabungan nilai energi MLII
vme1=[ea1,ed1]';
vme2=[ea2,ed2]';
vme3=[ea3,ed3]';
vme4=[ea4,ed4]';
vme5=[ea5,ed5]';
vme6=[ea6,ed6]';
vme7=[ea7,ed7]';
vme8=[ea8,ed8]';
vme9=[ea9,ed9]';
vme10=[ea10,ed10]';

vme11=[ea11,ed11]';
vme12=[ea12,ed12]';
vme13=[ea13,ed13]';
vme14=[ea14,ed14]';
vme15=[ea15,ed15]';
vme16=[ea16,ed16]';
vme17=[ea17,ed17]';
vme18=[ea18,ed18]';
vme19=[ea19,ed19]';
vme20=[ea20,ed20]';

%penggabungan nilai energi v1
vve1=[ea51,ed51]';
vve2=[ea52,ed52]';
vve3=[ea53,ed53]';
vve4=[ea54,ed54]';
vve5=[ea55,ed55]';
vve6=[ea56,ed56]';
vve7=[ea57,ed57]';
vve8=[ea58,ed58]';
vve9=[ea59,ed59]';
vve10=[ea60,ed60]';

vve11=[ea61,ed61]';
vve12=[ea62,ed62]';
vve13=[ea63,ed63]';
vve14=[ea64,ed64]';
vve15=[ea65,ed65]';
vve16=[ea66,ed66]';
vve17=[ea67,ed67]';
vve18=[ea68,ed68]';
vve19=[ea69,ed69]';
vve20=[ea70,ed70]';

%save data energi
save data_ventri_a vme1 vme2 vme3 vme4 vme5
vme6 vme7 vme8 vme9 vme10 vme11 vme12
vme13 vme14 vme15 vme16 vme17 vme18
vme19 vme20 vve1 vve2 vve3 vve4 vve5 vve6
vve7 vve8 vve9 vve10 vve11 vve12 vve13 vve14
vve15 vve16 vve17 vve18 vve19 vve20

%normalisasi
%normalisasi energi MLII
nvm1_a=normc(vme1);
nvm2_a=normc(vme2);
nvm3_a=normc(vme3);
nvm4_a=normc(vme4);
nvm5_a=normc(vme5);
nvm6_a=normc(vme6);
nvm7_a=normc(vme7);
nvm8_a=normc(vme8);
nvm9_a=normc(vme9);
nvm10_a=normc(vme10);

nvm11_a=normc(vme11);
nvm12_a=normc(vme12);
nvm13_a=normc(vme13);
nvm14_a=normc(vme14);
nvm15_a=normc(vme15);
nvm16_a=normc(vme16);
nvm17_a=normc(vme17);
nvm18_a=normc(vme18);
nvm19_a=normc(vme19);
nvm20_a=normc(vme20);

%normalisasi energi V1
nvv1_a=normc(vve1);
nvv2_a=normc(vve2);
nvv3_a=normc(vve3);
nvv4_a=normc(vve4);
nvv5_a=normc(vve5);
nvv6_a=normc(vve6);
nvv7_a=normc(vve7);
nvv8_a=normc(vve8);
nvv9_a=normc(vve9);
nvv10_a=normc(vve10);

nvv11_a=normc(vve11);
nvv12_a=normc(vve12);
nvv13_a=normc(vve13);
nvv14_a=normc(vve14);
nvv15_a=normc(vve15);
```

```
nvv16_a=normc(vve16);
nvv17_a=normc(vve17);
nvv18_a=normc(vve18);
nvv19_a=normc(vve19);
nvv20_a=normc(vve20);

%save data energi ternormalisasi
save norm_ventri_a nvm1_a nvm2_a nvm3_a
nvm4_a nvm5_a nvm6_a nvm7_a nvm8_a
nvm9_a nvm10_a nvm11_a nvm12_a nvm13_a
nvm14_a nvm15_a nvm16_a nvm17_a nvm18_a
nvm19_a nvm20_a nvv1_a nvv2_a nvv3_a
nvv4_a nvv5_a nvv6_a nvv7_a nvv8_a nvv9_a
nvv10_a nvv11_a nvv12_a nvv13_a nvv14_a
nvv15_a nvv16_a nvv17_a nvv18_a nvv19_a
nvv20_a
```

Segmentasi v ectopy subyek 7

```
clear
clc
%ventricular 231
load ve231.txt
%m
m=ve231(1:21600,2);
%v
v=ve231(1:21600,3);

%pengsegmenan MLII
m1=m(1:900);
m2=m(901:1800);
m3=m(1801:2700);
m4=m(2701:3600);
m5=m(3601:4500);
m6=m(4501:5400);
m7=m(5401:6300);
m8=m(6301:7200);
m9=m(7201:8100);
m10=m(8101:9000);

m11=m(9001:9900);
m12=m(9901:10800);
m13=m(10801:11700);
m14=m(11701:12600);
m15=m(12601:13500);
m16=m(13501:14400);
m17=m(14401:15300);
m18=m(15301:16200);
m19=m(16201:17100);
m20=m(17101:18000);

%pengsegmenan V1
v1=v(1:900);
v2=v(901:1800);
v3=v(1801:2700);
v4=v(2701:3600);
v5=v(3601:4500);
v6=v(4501:5400);
v7=v(5401:6300);
v8=v(6301:7200);
v9=v(7201:8100);
v10=v(8101:9000);

v11=v(9001:9900);
v12=v(9901:10800);
v13=v(10801:11700);
v14=v(11701:12600);
v15=v(12601:13500);
v16=v(13501:14400);
v17=v(14401:15300);
v18=v(15301:16200);
v19=v(16201:17100);
v20=v(17101:18000);

%energi MLII 10 segmen pertama
[c1,l1]=wavedec(m1,3,'db5');
[ea1,ed1]=wenergy(c1,l1);
[c2,l2]=wavedec(m2,3,'db5');
[ea2,ed2]=wenergy(c2,l2);
[c3,l3]=wavedec(m3,3,'db5');
[ea3,ed3]=wenergy(c3,l3);
[c4,l4]=wavedec(m4,3,'db5');
[ea4,ed4]=wenergy(c4,l4);
[c5,l5]=wavedec(m5,3,'db5');
[ea5,ed5]=wenergy(c5,l5);
[c6,l6]=wavedec(m6,3,'db5');
[ea6,ed6]=wenergy(c6,l6);
[c7,l7]=wavedec(m7,3,'db5');
[ea7,ed7]=wenergy(c7,l7);
[c8,l8]=wavedec(m8,3,'db5');
[ea8,ed8]=wenergy(c8,l8);
[c9,l9]=wavedec(m9,3,'db5');
[ea9,ed9]=wenergy(c9,l9);
[c10,l10]=wavedec(m10,3,'db5');
[ea10,ed10]=wenergy(c10,l10);

%energi MLII 10 segmen kedua
[c11,l11]=wavedec(m11,3,'db5');
[ea11,ed11]=wenergy(c11,l11);
[c12,l12]=wavedec(m12,3,'db5');
[ea12,ed12]=wenergy(c12,l12);
[c13,l13]=wavedec(m13,3,'db5');
[ea13,ed13]=wenergy(c13,l13);
[c14,l14]=wavedec(m14,3,'db5');
[ea14,ed14]=wenergy(c14,l14);
[c15,l15]=wavedec(m15,3,'db5');
[ea15,ed15]=wenergy(c15,l15);
[c16,l16]=wavedec(m16,3,'db5');
[ea16,ed16]=wenergy(c16,l16);
[c17,l17]=wavedec(m17,3,'db5');
[ea17,ed17]=wenergy(c17,l17);
[c18,l18]=wavedec(m18,3,'db5');
[ea18,ed18]=wenergy(c18,l18);
[c19,l19]=wavedec(m19,3,'db5');
[ea19,ed19]=wenergy(c19,l19);
[c20,l20]=wavedec(m20,3,'db5');
[ea20,ed20]=wenergy(c20,l20);

%energi V1 10 segmen pertama
[c51,l51]=wavedec(v1,3,'db5');
[ea51,ed51]=wenergy(c51,l51);
[c52,l52]=wavedec(v2,3,'db5');
[ea52,ed52]=wenergy(c52,l52);
[c53,l53]=wavedec(v3,3,'db5');
[ea53,ed53]=wenergy(c53,l53);
[c54,l54]=wavedec(v4,3,'db5');
[ea54,ed54]=wenergy(c54,l54);
```

```
[c55,l55]=wavedec(v5,3,'db5');
[ea55,ed55]=wenergy(c55,l55);
[c56,l56]=wavedec(v6,3,'db5');
[ea56,ed56]=wenergy(c56,l56);
[c57,l57]=wavedec(v7,3,'db5');
[ea57,ed57]=wenergy(c57,l57);
[c58,l58]=wavedec(v8,3,'db5');
[ea58,ed58]=wenergy(c58,l58);
[c59,l59]=wavedec(v9,3,'db5');
[ea59,ed59]=wenergy(c59,l59);
[c60,l60]=wavedec(v10,3,'db5');
[ea60,ed60]=wenergy(c60,l60);

%energi V1 10 segmen kedua
[c61,l61]=wavedec(v11,3,'db5');
[ea61,ed61]=wenergy(c61,l61);
[c62,l62]=wavedec(v12,3,'db5');
[ea62,ed62]=wenergy(c62,l62);
[c63,l63]=wavedec(v13,3,'db5');
[ea63,ed63]=wenergy(c63,l63);
[c64,l64]=wavedec(v14,3,'db5');
[ea64,ed64]=wenergy(c64,l64);
[c65,l65]=wavedec(v15,3,'db5');
[ea65,ed65]=wenergy(c65,l65);
[c66,l66]=wavedec(v16,3,'db5');
[ea66,ed66]=wenergy(c66,l66);
[c67,l67]=wavedec(v17,3,'db5');
[ea67,ed67]=wenergy(c67,l67);
[c68,l68]=wavedec(v18,3,'db5');
[ea68,ed68]=wenergy(c68,l68);
[c69,l69]=wavedec(v19,3,'db5');
[ea69,ed69]=wenergy(c69,l69);
[c70,l70]=wavedec(v20,3,'db5');
[ea70,ed70]=wenergy(c70,l70);

%penggabungan nilai energi
%penggabungan nilai energi MLII
vme1=[ea1,ed1]';
vme2=[ea2,ed2]';
vme3=[ea3,ed3]';
vme4=[ea4,ed4]';
vme5=[ea5,ed5]';
vme6=[ea6,ed6]';
vme7=[ea7,ed7]';
vme8=[ea8,ed8]';
vme9=[ea9,ed9]';
vme10=[ea10,ed10]';

vme11=[ea11,ed11]';
vme12=[ea12,ed12]';
vme13=[ea13,ed13]';
vme14=[ea14,ed14]';
vme15=[ea15,ed15]';
vme16=[ea16,ed16]';
vme17=[ea17,ed17]';
vme18=[ea18,ed18]';
vme19=[ea19,ed19]';
vme20=[ea20,ed20]';

%penggabungan nilai energi v1
vve1=[ea51,ed51]';
vve2=[ea52,ed52]';
vve3=[ea53,ed53]';
vve4=[ea54,ed54]';
vve5=[ea55,ed55]';
vve6=[ea56,ed56]';
vve7=[ea57,ed57]';
vve8=[ea58,ed58]';
vve9=[ea59,ed59]';
vve10=[ea60,ed60]';

vve11=[ea61,ed61]';
vve12=[ea62,ed62]';
vve13=[ea63,ed63]';
vve14=[ea64,ed64]';
vve15=[ea65,ed65]';
vve16=[ea66,ed66]';
vve17=[ea67,ed67]';
vve18=[ea68,ed68]';
vve19=[ea69,ed69]';
vve20=[ea70,ed70]';

%save data energi
save data_ventri_g vme1 vme2 vme3 vme4 vme5
vme6 vme7 vme8 vme9 vme10 vme11 vme12
vme13 vme14 vme15 vme16 vme17 vme18
vme19 vme20 vve1 vve2 vve3 vve4 vve5 vve6
vve7 vve8 vve9 vve10 vve11 vve12 vve13 vve14
vve15 vve16 vve17 vve18 vve19 vve20

%normalisasi
%normalisasi energi MLII
nvm1_g=normc(vme1);
nvm2_g=normc(vme2);
nvm3_g=normc(vme3);
nvm4_g=normc(vme4);
nvm5_g=normc(vme5);
nvm6_g=normc(vme6);
nvm7_g=normc(vme7);
nvm8_g=normc(vme8);
nvm9_g=normc(vme9);
nvm10_g=normc(vme10);

nvm11_g=normc(vme11);
nvm12_g=normc(vme12);
nvm13_g=normc(vme13);
nvm14_g=normc(vme14);
nvm15_g=normc(vme15);
nvm16_g=normc(vme16);
nvm17_g=normc(vme17);
nvm18_g=normc(vme18);
nvm19_g=normc(vme19);
nvm20_g=normc(vme20);

%normalisasi energi V1
nvv1_g=normc(vve1);
nvv2_g=normc(vve2);
nvv3_g=normc(vve3);
nvv4_g=normc(vve4);
nvv5_g=normc(vve5);
nvv6_g=normc(vve6);
nvv7_g=normc(vve7);
nvv8_g=normc(vve8);
nvv9_g=normc(vve9);
nvv10_g=normc(vve10);
```

```
nvv11_g=normc(vve11);
nvv12_g=normc(vve12);
nvv13_g=normc(vve13);
nvv14_g=normc(vve14);
nvv15_g=normc(vve15);
nvv16_g=normc(vve16);
nvv17_g=normc(vve17);
nvv18_g=normc(vve18);
nvv19_g=normc(vve19);
nvv20_g=normc(vve20);

%save data energi ternormalisasi
save norm_ventri_g  nvm1_g nvm2_g nvm3_g
nvm4_g nvm5_g nvm6_g nvm7_g nvm8_g
nvm9_g nvm10_g nvm11_g nvm12_g nvm13_g
nvm14_g nvm15_g nvm16_g nvm17_g nvm18_g
nvm19_g nvm20_g nvv1_g nvv2_g nvv3_g
nvv4_g nvv5_g nvv6_g nvv7_g nvv8_g nvv9_g
nvv10_g nvv11_g nvv12_g nvv13_g nvv14_g
nvv15_g nvv16_g nvv17_g nvv18_g nvv19_g
nvv20_g
```

Data Sig 0
Segmentasi s arrhythmia subyek 1

```
clear
clc
%supraventricular 800
load sva800.txt
%s
s=sva800(1:7680,2);

%s pengsegmenan S
s1=s(1:200);
s2=s(201:400);
s3=s(401:600);
s4=s(601:800);
s5=s(801:1000);
s6=s(1001:1200);
s7=s(1201:1400);
s8=s(1401:1600);
s9=s(1601:1800);
s10=s(1801:2000);

s11=s(2001:2200);
s12=s(2201:2400);
s13=s(2401:2600);
s14=s(2601:2800);
s15=s(2801:3000);
s16=s(3001:3200);
s17=s(3201:3400);
s18=s(3401:3600);
s19=s(3601:3800);
s20=s(3801:4000);

%Energi s0 10 segmen pertama
[c1,l1]=wavedec(s1,3,'db5');
[ea1,ed1]=wenergy(c1,l1);
[c2,l2]=wavedec(s2,3,'db5');
[ea2,ed2]=wenergy(c2,l2);
[c3,l3]=wavedec(s3,3,'db5');
[ea3,ed3]=wenergy(c3,l3);
[c4,l4]=wavedec(s4,3,'db5');
[ea4,ed4]=wenergy(c4,l4);
[c5,l5]=wavedec(s5,3,'db5');
[ea5,ed5]=wenergy(c5,l5);
[c6,l6]=wavedec(s6,3,'db5');
[ea6,ed6]=wenergy(c6,l6);
[c7,l7]=wavedec(s7,3,'db5');
[ea7,ed7]=wenergy(c7,l7);
[c8,l8]=wavedec(s8,3,'db5');
[ea8,ed8]=wenergy(c8,l8);
[c9,l9]=wavedec(s9,3,'db5');
[ea9,ed9]=wenergy(c9,l9);
[c10,l10]=wavedec(s10,3,'db5');
[ea10,ed10]=wenergy(c10,l10);

%Energi s0 10 segmen kedua
[c11,l11]=wavedec(s11,3,'db5');
[ea11,ed11]=wenergy(c11,l11);
[c12,l12]=wavedec(s12,3,'db5');
[ea12,ed12]=wenergy(c12,l12);
[c13,l13]=wavedec(s13,3,'db5');
[ea13,ed13]=wenergy(c13,l13);
[c14,l14]=wavedec(s14,3,'db5');
[ea14,ed14]=wenergy(c14,l14);
[c15,l15]=wavedec(s15,3,'db5');
[ea15,ed15]=wenergy(c15,l15);
[c16,l16]=wavedec(s16,3,'db5');
[ea16,ed16]=wenergy(c16,l16);
[c17,l17]=wavedec(s17,3,'db5');
[ea17,ed17]=wenergy(c17,l17);
[c18,l18]=wavedec(s18,3,'db5');
[ea18,ed18]=wenergy(c18,l18);
[c19,l19]=wavedec(s19,3,'db5');
[ea19,ed19]=wenergy(c19,l19);
[c20,l20]=wavedec(s20,3,'db5');
[ea20,ed20]=wenergy(c20,l20);

%penggabungan nilai energi s0
sse1=[ea1,ed1]';
sse2=[ea2,ed2]';
sse3=[ea3,ed3]';
sse4=[ea4,ed4]';
sse5=[ea5,ed5]';
sse6=[ea6,ed6]';
sse7=[ea7,ed7]';
sse8=[ea8,ed8]';
sse9=[ea9,ed9]';
sse10=[ea10,ed10]';

sse11=[ea11,ed11]';
sse12=[ea12,ed12]';
sse13=[ea13,ed13]';
sse14=[ea14,ed14]';
sse15=[ea15,ed15]';
sse16=[ea16,ed16]';
sse17=[ea17,ed17]';
sse18=[ea18,ed18]';
sse19=[ea19,ed19]';
sse20=[ea20,ed20]';

%save data energi
save data_supra_a sse1 sse2 sse3 sse4 sse5 sse6
sse7 sse8 sse9 sse10 sse11 sse12 sse13 sse14
sse15 sse16 sse17 sse18 sse19 sse20

%normalisasi energi s0
nss1_a=normc(sse1);
nss2_a=normc(sse2);
nss3_a=normc(sse3);
nss4_a=normc(sse4);
nss5_a=normc(sse5);
nss6_a=normc(sse6);
nss7_a=normc(sse7);
nss8_a=normc(sse8);
nss9_a=normc(sse9);
nss10_a=normc(sse10);

nss11_a=normc(sse11);
nss12_a=normc(sse12);
nss13_a=normc(sse13);
nss14_a=normc(sse14);
nss15_a=normc(sse15);
nss16_a=normc(sse16);
nss17_a=normc(sse17);
nss18_a=normc(sse18);
nss19_a=normc(sse19);
```

```
nss20_a=normc(sse20);

%save data energi ternormalisasi
save norm_supra_a nss1_a nss2_a nss3_a nss4_a
nss5_a nss6_a nss7_a nss8_a nss9_a nss10_a
nss11_a nss12_a nss13_a nss14_a nss15_a
nss16_a nss17_a nss18_a nss19_a nss20_a
```

Segmentasi s arrhythmia subyek 7

```
clear
clc
%supraventricular 875
load sva875.txt
%s
s=sva875(1:7680,2);

%s pengsegmenan S
s1=s(1:200);
s2=s(201:400);
s3=s(401:600);
s4=s(601:800);
s5=s(801:1000);
s6=s(1001:1200);
s7=s(1201:1400);
s8=s(1401:1600);
s9=s(1601:1800);
s10=s(1801:2000);

s11=s(2001:2200);
s12=s(2201:2400);
s13=s(2401:2600);
s14=s(2601:2800);
s15=s(2801:3000);
s16=s(3001:3200);
s17=s(3201:3400);
s18=s(3401:3600);
s19=s(3601:3800);
s20=s(3801:4000);

%Energi s0 10 segmen pertama
[c1,l1]=wavedec(s1,3,'db5');
[ea1,ed1]=wenergy(c1,l1);
[c2,l2]=wavedec(s2,3,'db5');
[ea2,ed2]=wenergy(c2,l2);
[c3,l3]=wavedec(s3,3,'db5');
[ea3,ed3]=wenergy(c3,l3);
[c4,l4]=wavedec(s4,3,'db5');
[ea4,ed4]=wenergy(c4,l4);
[c5,l5]=wavedec(s5,3,'db5');
[ea5,ed5]=wenergy(c5,l5);
[c6,l6]=wavedec(s6,3,'db5');
[ea6,ed6]=wenergy(c6,l6);
[c7,l7]=wavedec(s7,3,'db5');
[ea7,ed7]=wenergy(c7,l7);
[c8,l8]=wavedec(s8,3,'db5');
[ea8,ed8]=wenergy(c8,l8);
[c9,l9]=wavedec(s9,3,'db5');
[ea9,ed9]=wenergy(c9,l9);
[c10,l10]=wavedec(s10,3,'db5');
[ea10,ed10]=wenergy(c10,l10);

%Energi s0 10 segmen kedua
[c11,l11]=wavedec(s11,3,'db5');
[ea11,ed11]=wenergy(c11,l11);
[c12,l12]=wavedec(s12,3,'db5');
[ea12,ed12]=wenergy(c12,l12);
[c13,l13]=wavedec(s13,3,'db5');
[ea13,ed13]=wenergy(c13,l13);
[c14,l14]=wavedec(s14,3,'db5');
[ea14,ed14]=wenergy(c14,l14);
[c15,l15]=wavedec(s15,3,'db5');
[ea15,ed15]=wenergy(c15,l15);
[c16,l16]=wavedec(s16,3,'db5');
[ea16,ed16]=wenergy(c16,l16);
[c17,l17]=wavedec(s17,3,'db5');
[ea17,ed17]=wenergy(c17,l17);
[c18,l18]=wavedec(s18,3,'db5');
[ea18,ed18]=wenergy(c18,l18);
[c19,l19]=wavedec(s19,3,'db5');
[ea19,ed19]=wenergy(c19,l19);
[c20,l20]=wavedec(s20,3,'db5');
[ea20,ed20]=wenergy(c20,l20);

%penggabungan nilai energi s0
sse1=[ea1,ed1]';
sse2=[ea2,ed2]';
sse3=[ea3,ed3]';
sse4=[ea4,ed4]';
sse5=[ea5,ed5]';
sse6=[ea6,ed6]';
sse7=[ea7,ed7]';
sse8=[ea8,ed8]';
sse9=[ea9,ed9]';
sse10=[ea10,ed10]';

sse11=[ea11,ed11]';
sse12=[ea12,ed12]';
sse13=[ea13,ed13]';
sse14=[ea14,ed14]';
sse15=[ea15,ed15]';
sse16=[ea16,ed16]';
sse17=[ea17,ed17]';
sse18=[ea18,ed18]';
sse19=[ea19,ed19]';
sse20=[ea20,ed20]';

%save data energi
save data_supra_g sse1 sse2 sse3 sse4 sse5 sse6
sse7 sse8 sse9 sse10 sse11 sse12 sse13 sse14
sse15 sse16 sse17 sse18 sse19 sse20

%normalisasi energi s0
nss1_g=normc(sse1);
nss2_g=normc(sse2);
nss3_g=normc(sse3);
nss4_g=normc(sse4);
nss5_g=normc(sse5);
nss6_g=normc(sse6);
nss7_g=normc(sse7);
nss8_g=normc(sse8);
nss9_g=normc(sse9);
nss10_g=normc(sse10);

nss11_g=normc(sse11);
nss12_g=normc(sse12);
```

```
nss13_g=normc(sse13);
nss14_g=normc(sse14);
nss15_g=normc(sse15);
nss16_g=normc(sse16);
nss17_g=normc(sse17);
nss18_g=normc(sse18);
nss19_g=normc(sse19);
nss20_g=normc(sse20);

%save data energi ternormalisasi
save norm_supra_g nss1_g nss2_g nss3_g nss4_g
nss5_g nss6_g nss7_g nss8_g nss9_g nss10_g
nss11_g nss12_g nss13_g nss14_g nss15_g
nss16_g nss17_g nss18_g nss19_g nss20_g
```

Segmentasi v tachyarrhythmia subyek 1

```
clear
clc
%ventricular cu01
load cu01.txt
%s
s=cu01(1:7680,2);

%s pengsegmenan S
s1=s(1:200);
s2=s(201:400);
s3=s(401:600);
s4=s(601:800);
s5=s(801:1000);
s6=s(1001:1200);
s7=s(1201:1400);
s8=s(1401:1600);
s9=s(1601:1800);
s10=s(1801:2000);

s11=s(2001:2200);
s12=s(2201:2400);
s13=s(2401:2600);
s14=s(2601:2800);
s15=s(2801:3000);
s16=s(3001:3200);
s17=s(3201:3400);
s18=s(3401:3600);
s19=s(3601:3800);
s20=s(3801:4000);

%Energi s0 10 segmen pertama
[c1,l1]=wavedec(s1,3,'db5');
[ea1,ed1]=wenergy(c1,l1);
[c2,l2]=wavedec(s2,3,'db5');
[ea2,ed2]=wenergy(c2,l2);
[c3,l3]=wavedec(s3,3,'db5');
[ea3,ed3]=wenergy(c3,l3);
[c4,l4]=wavedec(s4,3,'db5');
[ea4,ed4]=wenergy(c4,l4);
[c5,l5]=wavedec(s5,3,'db5');
[ea5,ed5]=wenergy(c5,l5);
[c6,l6]=wavedec(s6,3,'db5');
[ea6,ed6]=wenergy(c6,l6);
[c7,l7]=wavedec(s7,3,'db5');
[ea7,ed7]=wenergy(c7,l7);
[c8,l8]=wavedec(s8,3,'db5');
[ea8,ed8]=wenergy(c8,l8);
[c9,l9]=wavedec(s9,3,'db5');
[ea9,ed9]=wenergy(c9,l9);
[c10,l10]=wavedec(s10,3,'db5');
[ea10,ed10]=wenergy(c10,l10);

%Energi s0 10 segmen kedua
[c11,l11]=wavedec(s11,3,'db5');
[ea11,ed11]=wenergy(c11,l11);
[c12,l12]=wavedec(s12,3,'db5');
[ea12,ed12]=wenergy(c12,l12);
[c13,l13]=wavedec(s13,3,'db5');
[ea13,ed13]=wenergy(c13,l13);
[c14,l14]=wavedec(s14,3,'db5');
[ea14,ed14]=wenergy(c14,l14);
[c15,l15]=wavedec(s15,3,'db5');
[ea15,ed15]=wenergy(c15,l15);
[c16,l16]=wavedec(s16,3,'db5');
[ea16,ed16]=wenergy(c16,l16);
[c17,l17]=wavedec(s17,3,'db5');
[ea17,ed17]=wenergy(c17,l17);
[c18,l18]=wavedec(s18,3,'db5');
[ea18,ed18]=wenergy(c18,l18);
[c19,l19]=wavedec(s19,3,'db5');
[ea19,ed19]=wenergy(c19,l19);
[c20,l20]=wavedec(s20,3,'db5');
[ea20,ed20]=wenergy(c20,l20);

%penggabungan nilai energy s0
vse1=[ea1,ed1]';
vse2=[ea2,ed2]';
vse3=[ea3,ed3]';
vse4=[ea4,ed4]';
vse5=[ea5,ed5]';
vse6=[ea6,ed6]';
vse7=[ea7,ed7]';
vse8=[ea8,ed8]';
vse9=[ea9,ed9]';
vse10=[ea10,ed10]';

vse11=[ea11,ed11]';
vse12=[ea12,ed12]';
vse13=[ea13,ed13]';
vse14=[ea14,ed14]';
vse15=[ea15,ed15]';
vse16=[ea16,ed16]';
vse17=[ea17,ed17]';
vse18=[ea18,ed18]';
vse19=[ea19,ed19]';
vse20=[ea20,ed20]';

%save energi s0
save data_ventri_a vse1 vse2 vse3 vse4 vse5 vse6
vse7 vse8 vse9 vse10 vse11 vse12 vse13 vse14
vse15 vse16 vse17 vse18 vse19 vse20

%normalisasi energi s0
nvs1_a=normc(vse1);
nvs2_a=normc(vse2);
nvs3_a=normc(vse3);
nvs4_a=normc(vse4);
nvs5_a=normc(vse5);
```

```
nvs6_a=normc(vse6);
nvs7_a=normc(vse7);
nvs8_a=normc(vse8);
nvs9_a=normc(vse9);
nvs10_a=normc(vse10);

nvs11_a=normc(vse11);
nvs12_a=normc(vse12);
nvs13_a=normc(vse13);
nvs14_a=normc(vse14);
nvs15_a=normc(vse15);
nvs16_a=normc(vse16);
nvs17_a=normc(vse17);
nvs18_a=normc(vse18);
nvs19_a=normc(vse19);
nvs20_a=normc(vse20);

%save energi ternormalisasi
save norm_ventri_a nvs1_a nvs2_a nvs3_a
nvs4_a nvs5_a nvs6_a nvs7_a nvs8_a nvs9_a
nvs10_a nvs11_a nvs12_a nvs13_a nvs14_a
nvs15_a nvs16_a nvs17_a nvs18_a nvs19_a
nvs20_a
```

Segmentasi v tachyarrhythmia subyek 7

```
clear
clc
%ventricular cu35
load cu35.txt
%s
s=cu35(1:7680,2);

%s pengsegmenan S
s1=s(1:200);
s2=s(201:400);
s3=s(401:600);
s4=s(601:800);
s5=s(801:1000);
s6=s(1001:1200);
s7=s(1201:1400);
s8=s(1401:1600);
s9=s(1601:1800);
s10=s(1801:2000);

s11=s(2001:2200);
s12=s(2201:2400);
s13=s(2401:2600);
s14=s(2601:2800);
s15=s(2801:3000);
s16=s(3001:3200);
s17=s(3201:3400);
s18=s(3401:3600);
s19=s(3601:3800);
s20=s(3801:4000);

%Energi s0 10 segmen pertama
[c1,l1]=wavedec(s1,3,'db5');
[ea1,ed1]=wenergy(c1,l1);
[c2,l2]=wavedec(s2,3,'db5');
[ea2,ed2]=wenergy(c2,l2);
[c3,l3]=wavedec(s3,3,'db5');
[ea3,ed3]=wenergy(c3,l3);
[c4,l4]=wavedec(s4,3,'db5');
[ea4,ed4]=wenergy(c4,l4);
[c5,l5]=wavedec(s5,3,'db5');
[ea5,ed5]=wenergy(c5,l5);
[c6,l6]=wavedec(s6,3,'db5');
[ea6,ed6]=wenergy(c6,l6);
[c7,l7]=wavedec(s7,3,'db5');
[ea7,ed7]=wenergy(c7,l7);
[c8,l8]=wavedec(s8,3,'db5');
[ea8,ed8]=wenergy(c8,l8);
[c9,l9]=wavedec(s9,3,'db5');
[ea9,ed9]=wenergy(c9,l9);
[c10,l10]=wavedec(s10,3,'db5');
[ea10,ed10]=wenergy(c10,l10);

%Energi s0 10 segmen kedua
[c11,l11]=wavedec(s11,3,'db5');
[ea11,ed11]=wenergy(c11,l11);
[c12,l12]=wavedec(s12,3,'db5');
[ea12,ed12]=wenergy(c12,l12);
[c13,l13]=wavedec(s13,3,'db5');
[ea13,ed13]=wenergy(c13,l13);
[c14,l14]=wavedec(s14,3,'db5');
[ea14,ed14]=wenergy(c14,l14);
[c15,l15]=wavedec(s15,3,'db5');
[ea15,ed15]=wenergy(c15,l15);
[c16,l16]=wavedec(s16,3,'db5');
[ea16,ed16]=wenergy(c16,l16);
[c17,l17]=wavedec(s17,3,'db5');
[ea17,ed17]=wenergy(c17,l17);
[c18,l18]=wavedec(s18,3,'db5');
[ea18,ed18]=wenergy(c18,l18);
[c19,l19]=wavedec(s19,3,'db5');
[ea19,ed19]=wenergy(c19,l19);
[c20,l20]=wavedec(s20,3,'db5');
[ea20,ed20]=wenergy(c20,l20);

%penggabungan nilai energi s0
vse1=[ea1,ed1]';
vse2=[ea2,ed2]';
vse3=[ea3,ed3]';
vse4=[ea4,ed4]';
vse5=[ea5,ed5]';
vse6=[ea6,ed6]';
vse7=[ea7,ed7]';
vse8=[ea8,ed8]';
vse9=[ea9,ed9]';
vse10=[ea10,ed10]';

vse11=[ea11,ed11]';
vse12=[ea12,ed12]';
vse13=[ea13,ed13]';
vse14=[ea14,ed14]';
vse15=[ea15,ed15]';
vse16=[ea16,ed16]';
vse17=[ea17,ed17]';
vse18=[ea18,ed18]';
vse19=[ea19,ed19]';
vse20=[ea20,ed20]';

%save energi s0
```

```
save data_ventri_g vse1 vse2 vse3 vse4 vse5 vse6
vse7 vse8 vse9 vse10 vse11 vse12 vse13 vse14
vse15 vse16 vse17 vse18 vse19 vse20

%normalisasi energi s0
nvs1_g=normc(vse1);
nvs2_g=normc(vse2);
nvs3_g=normc(vse3);
nvs4_g=normc(vse4);
nvs5_g=normc(vse5);
nvs6_g=normc(vse6);
nvs7_g=normc(vse7);
nvs8_g=normc(vse8);
nvs9_g=normc(vse9);
nvs10_g=normc(vse10);

nvs11_g=normc(vse11);
nvs12_g=normc(vse12);
nvs13_g=normc(vse13);
nvs14_g=normc(vse14);
nvs15_g=normc(vse15);
nvs16_g=normc(vse16);
nvs17_g=normc(vse17);
nvs18_g=normc(vse18);
nvs19_g=normc(vse19);
nvs20_g=normc(vse20);

%save energi ternormalisasi
save norm_ventri_g nvs1_g nvs2_g nvs3_g
nvs4_g nvs5_g nvs6_g nvs7_g nvs8_g nvs9_g
nvs10_g nvs11_g nvs12_g nvs13_g nvs14_g
nvs15_g nvs16_g nvs17_g nvs18_g nvs19_g
nvs20_g
```