

```

% WAVELET
s=imread('cameraman.tif');
figure,imshow(s),title('original image');
I1=double(s);
%first decomposition
[aa,hh,vv,dd]=dwt2(I1,'db4');
I2=[aa,hh;vv,dd];
figure,imshow(uint8(I2)),title('first level decomposition ');
%second decomposition
[a,h,v,d]=dwt2(I2,'db4');
I3=double([a,h;v,d]);
figure,imshow(uint8(I3)),title('second level decomposition ');
A0 = idwt2(aa,hh,vv,dd , 'db4');
figure,imshow(uint8(A0)),title('inverse dwt image');

```