```
%image input
imagei1 = imread('F:/PROJECT/im/jug/jug_1.png');
imagei2 = imread('F:/PROJECT/im/jug/jug_2.png');


im_sizer = size(imagei1,1);block_sizer =
floor(im_sizer/8);sr=im_sizer-block_sizer*8;sr=8-sr;
im_sizec = size(imagei1,2);block_sizec =
floor(im_sizec/8);sc=im_sizec-block_sizec*8;sc=8-sc;
for r=1:im_sizer+sr
   for c=1:im_sizec+sc
      if r>im_sizer||c>im_sizec
         image1(r,c)=0;
         image2(r,c)=0;
      else
         image1(r,c)=imagei1(r,c);
         image2(r,c)=imagei2(r,c);
      end
   end
end
count =0;
for r=0:block_sizer
  for c=0:block_sizec
   [imr,im_select(r+1,c+1)]=block(image1,image2,r,c);
   i=8*r+1;c1=1;
```

```
   j=8*c+1;c2=1;
   for x=i:i+7
      for y=j:j+7
       fin(x,y)=imr(c1,c2);
       c2=c2+1;
      end
      c1=c1+1;
   end
 end
end
for r=1:im_sizer
   for c=1:im_sizec
      final_image(r,c)=fin(r,c);
   end
end
%imwrite(mat2gray(final_image),'F:/PROJECT/cfused_dct_svd.png'
);


for j=1:block_sizec+1
   for i=1:block_sizer+1
      W(i,j)=0;
      for pp=i-19:i+19
         for qq=j-19:j+19
            if pp>=1&&pp<=block_sizer+1
```

```
            if qq>=1&&qq<=block_sizec+1
               W(i,j)=W(i,j)+im_select(pp,qq);
            end
          end
        end
    end
  if W(i,j)>0
    W(i,j)=1;
  else
    W(i,j)=-1;
  end


%using cltran();column vise percent count
  %{
  col=zeros(block_sizer+1,1);
  coli=zeros(block_sizer+1,1);
  for i=1:block_sizer+1
    col(i,1)=im_select(i,j);
  end
  coli=cltrans(col,coli,1,block_sizer+1);
  for i=1:block_sizer+1
    W(i,j)=coli(i,1);
  end
```

```
   %}
   end
end

%using rectrans(); block vise percent count
   %w1=im_select;
   %W=rectrans(im_select,w1,1,block_sizer+1,1,block_sizec+1);
for r=0:block_sizer
  for c=0:block_sizec
     [imr,stat]=block2(im_select,W,image1,image2,r,c);
     if stat==1
        i=8*r+1;c1=1;
        j=8*c+1;c2=1;
        for x=i:i+7
          for y=j:j+7
            fin(x,y)=imr(c1,c2);
            c2=c2+1;
          end
          c1=c1+1;
        end
     end
  end
end
for r=1:im_sizer
```

```
   for c=1:im_sizec
      final_image(r,c)=fin(r,c);
   end
end
imwrite(mat2gray(final_image),'F:/PROJECT/im/jug/jug_fused_dct_
svd_cv9.png');
val3=imread('F:/PROJECT/im/jug/jug_fused_dct_svd_cv9.png');
ref=imread('F:/PROJECT/im/jug/jug_ref.png');
psnr_val=psnr(val3,ref)
ssim_val=ssim(val3,ref)
%{
val1=imread('F:/PROJECT/cfused_dct_svd_cv.png');
val2=imread('F:/PROJECT/cfused_dct_svd.png');
val3=imread('F:/PROJECT/im/jug/jug_ref.png');
without_cv_psnr=psnr(val1,val3)
without_cv_ssim=ssim(val1,val3)
with_cv_psnr=psnr(val2,val3)
with_cv_ssim=ssim(val2,val3)
%}
```