

%Image Compression: Transform Coding(DCT)

```
taj = imread('city1.bmp');  
subplot(2,2,1);  
imshow(taj);  
title('Original Image');
```

```
tajDCT = dct2(taj);  
%figure, imshow(log(abs(tajDCT)));  
tajDCT( abs(tajDCT ) < 100) = 0;  
tajIDCT = idct2(tajDCT);
```

```
subplot(2,2,2);  
imshow(tajIDCT, [0, 255]);  
title('Reconstructed with Quantization < 100');
```

```
%imwrite(mat2gray(tajIDCT), 'Reconstructed.bmp');  
imwrite(uint8(tajIDCT), 'ReconstructedCity1.bmp');  
subplot(2,2,3);  
imhist(taj);  
title('Original Image Histogram');
```

```
subplot(2,2,4);  
imhist(uint8(tajIDCT));  
title('Reconstructed Image Histogram');
```