Experiment no 9 :DCT Of image

clc;

clear all;

close all;

% square image

x1 = imread('mahip.jpg');

x=rgb2gray(x1);

x = imresize(x,[128 128]);

x=double(x);

[m,n]= size(x);

const = sqrt(2/n);

for u=0:1:n-1;

 for v=0:1:n-1;

 if u == 0;

 c(u+1,v+1)=(1/sqrt(n));

 else

 a=2\*v;

 c(u+1,v+1)= const\*cos((pi\*(a+1)\*u)/(2\*n));

 end;

 end;

end;

final\_dct = c\*x\*c'