C:\Users\acer\Documents\MATLAB\ktudsp_lab\Scilab\discrete_cosine_transform.sce Page 1 of 1 29-Jan-21 12:54:33 PM

```
//To perform Discrete Cosine Transform (block compression)
 2
     clc;
 3
     clear;
     ieee(0);
 4
 5
     x = 50;
     I1 = linspace(1,50);
 6
 7
     disp("Input Matrix =", I1);
     I2 = dct(I1);
 8
 9
     I3 = [I2(1:x), zeros(1, (100-x))];
     I4 = idct(I3);
10
11
     disp("Decompressed Matrix =",I4);
12
     //Mean Square Error
13
     for i = 1:100
14
         [m(1,i)] = abs(I1(i) - I4(i))^2;
15
     end
16
     disp("Mean Square Error =",m);
17
```