clc

close all

clear all

t = 0:0.0001:20;

c=input ('Enter Bit Depth of PCM Coding:');

part = -1:0.1:1;

codebook = -1:0.1:1.1;

msg = cos(t);

[~,quants] = quantiz(msg,part,codebook);

subplot(3,1,1);

plot(t,msg);

title('Message Signal');

subplot(3,1,2);

plot(t,quants);

title('Quantized Signal');

y = uencode(quants,c);

ybin=dec2bin(y,c);

subplot(3,1,3);

plot(t,y);

title('PCM PLOT');