//Name : Tushar Bhand

//Roll no.: 204A024

*//program to calculate Signal to noise ratio for DM system*

clc;

clear;

close;

fm=input ("Enter value of Message signal :");

FM=input ("Enter value of cut off frequency of LPF filter :");

Fs=input ("Enter value of Sampling frequency :");

Ts=1/Fs;

SNR=3/(8\*((%pi)^2)\*(fm^2)\*FM\*(Ts^3));

SNR=10\*log(SNR)

disp ("SNR in db is = ")

disp(SNR)

Output:

Enter value of Message signal :1000

Enter value of cut off frequency of LPF filter :3000

Enter value of Sampling frequency :10000

"SNR in db is = "

25.388540

*//program to calculate Signal to noise ratio for PCM system*

clc;

clear ;

close ;

n = input("Enter number of bits :");

//SNR=3\*L^2\*0.5;

// SNR for Sin signal

SNRDB = (1.78+n\*6)

disp ("SNR in db is = ")

disp(SNRDB)

Output:

Enter number of bits :8

"SNR in db is = "

49.78