Laboratory Pre-Work 2

1. Write a MATLAB program that will generate a vector with 10 consequtive ones and another vector with five consequtive ones, such as

x = [1,1,1,1,1,1,1,1,1,1]

h = [1,1,1,1,1]

   Calculate convolution of those discrete-time signals and plot the the resulsts by using subplot for 0<n<30

2. Generate a signal as an impulse response of a discrete-time system as
   H = (1/2)^n, for 0<n<20
   0, otherwise
   Calculate output of the discrete-time system when the input in part (1) is given. Plot the results by using subplot for 0<n<50
3. Generate a signal as an impulse response of a discrete-time system as
   H = (1/3)^n, for 0<n<20
   X = cos(2*pi/5*n), for 0<n<20
   Calculate output of the discrete-time system. Plot the results by using subplot for 0<n<20