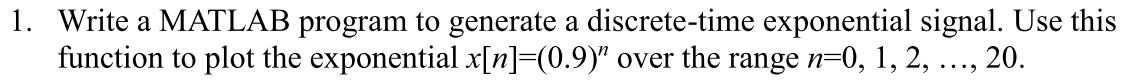
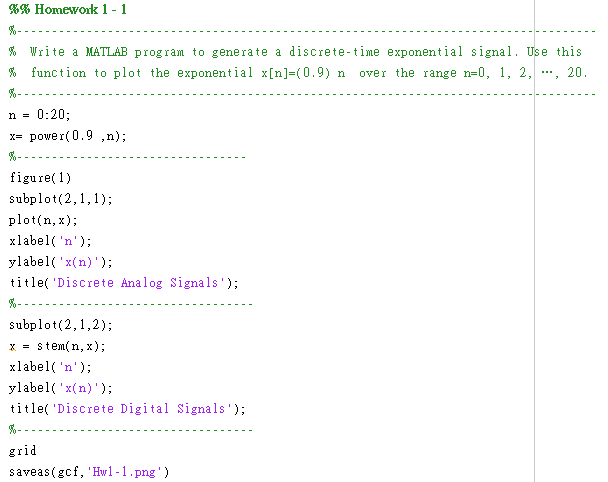
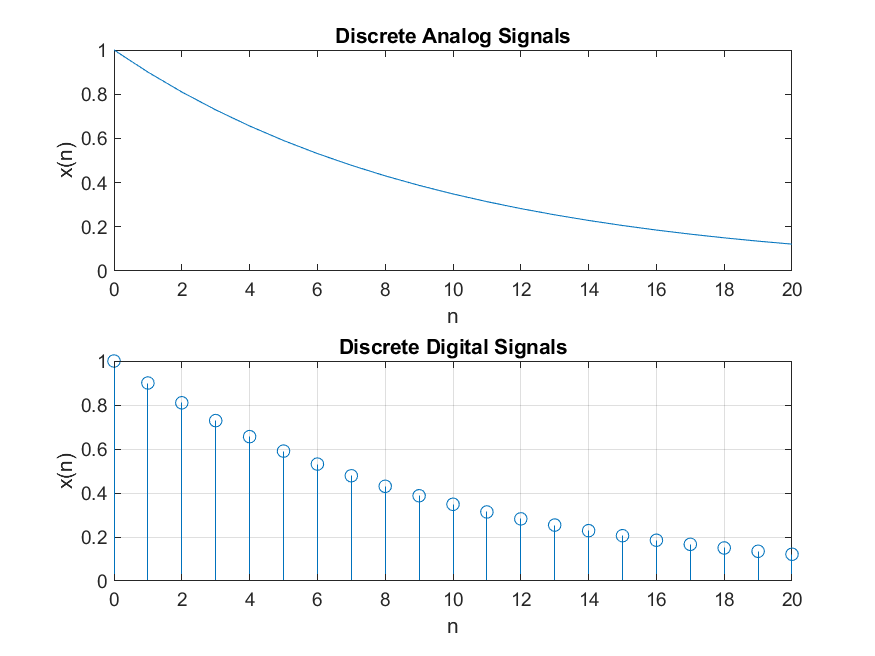
Digital Signal Processing Project of Chapter 2

Homework 1 – 1





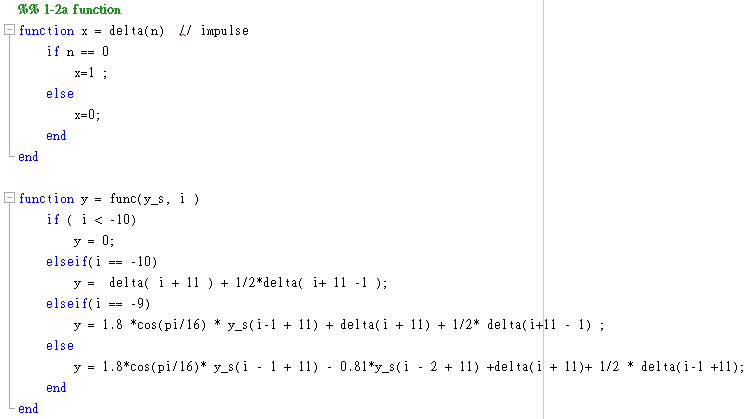
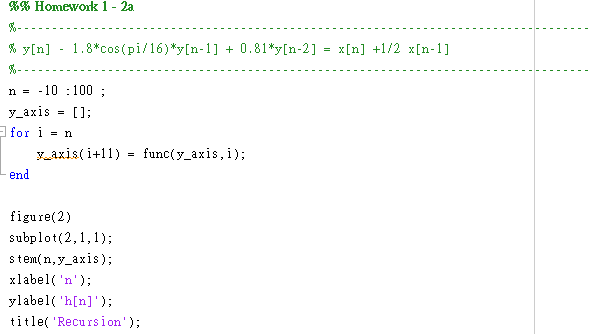
The homework 1-1 have 2 figures , Discrete Analog Signals (right top) and Discrete Digtial Signals(right bottom).

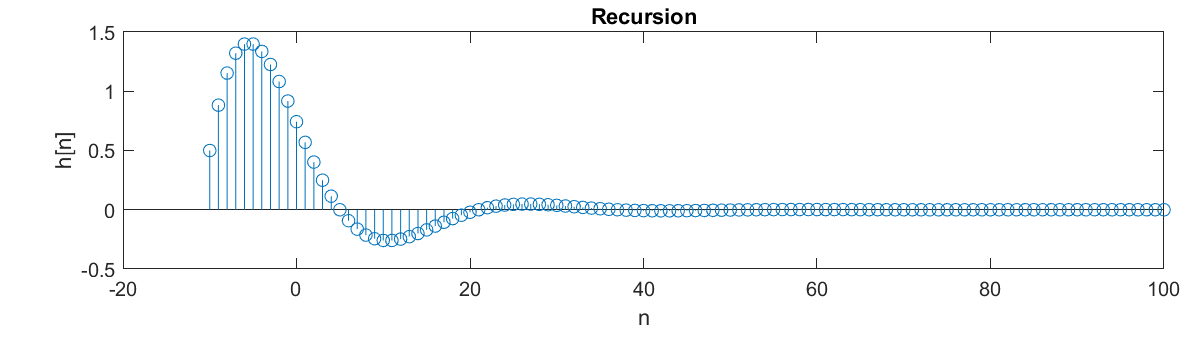
This code said :

1. Use n = 0: 20 arranged the range is 0 to 20.
2. The mathematical function is .
3. First use plot() function to plot the mathematical function.
4. Second use stem() founction to stem the mathematical function.
5. Finally , save the total figure.

Home work 1 – 2a

Using recursion generate and plot the impulse response h[n].





Homework 1-2a use a recursion to generate signals , but the recursion is too slow to run.

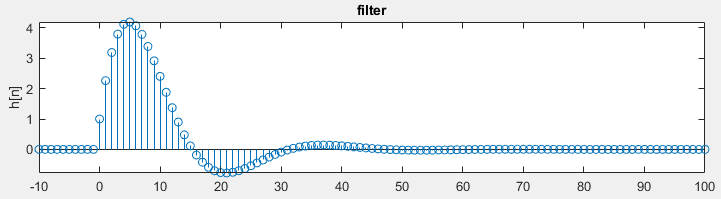
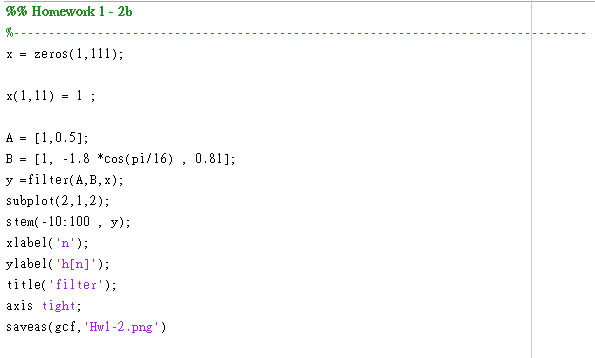
So when it run the recursion , it must record it variables itself.

Function 1

Function 2 Recursion

Homework 1-2b

Using the filter function generate and plot the impulse response h[n].



Using filter function is easy and no Time-consuming.

Just dismantle the recursion :

And use filter() to finish the work.