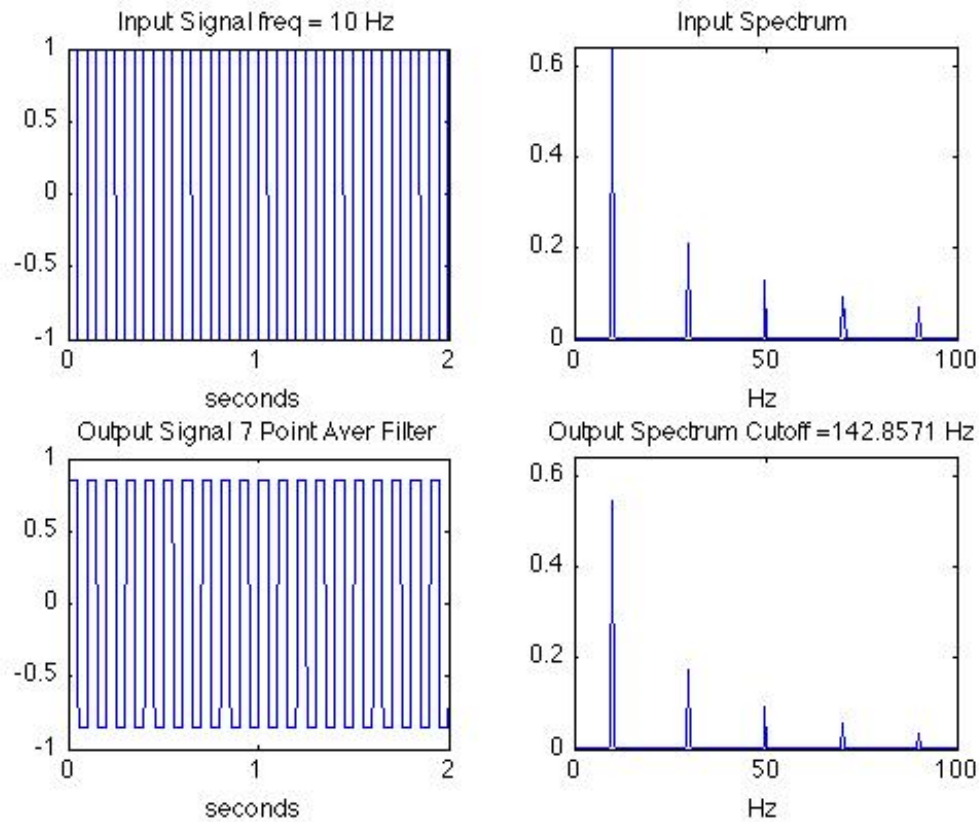


## LAB 7

1. Write a program that inputs a square wave into a L-point averaging filter and determine the output. Use the FIR difference equation to achieve this. Plot both the signal and their spectrum for 2 frequencies with 2 values of L for each frequency. Make sure you calculate the cutoff frequency= $2\pi/L$  in Hz.

Here is an example of the output you should provide.



- Write a program that inputs a square wave into a L-point averaging filter and determine the output. Use the frequency response to achieve this. Plot both the signal and the frequency response for the filter for 2 frequencies with 2 values of L for each frequency. Make sure you calculate the cutoff frequency= $2\pi/L$  and digitized frequency of the signal.

Here is an example of the output you should provide.

