

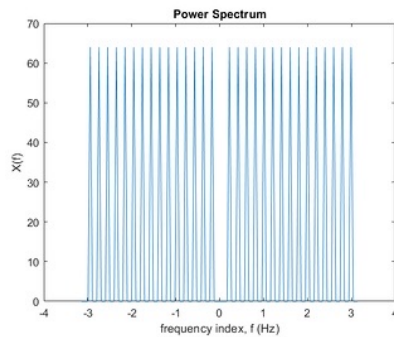
(a)

Language used : MATLAB.

source code : Problem_3a.m

Plot file : Problem_3a.png

figure : figure (a)



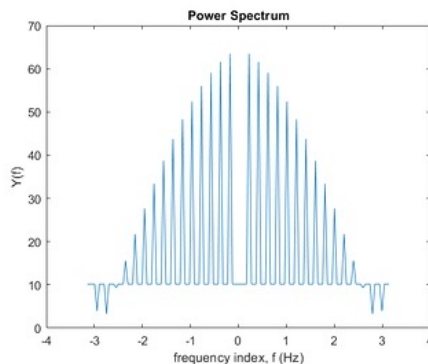
(b)

Language used : MATLAB

source code : Problem_3b.m

Plot file : Problem_3b.png

figure : figure (b)



similarity or differences: In figure (a), at different frequencies the signal has equal maximum peak. And in figure (b),

the amplitude of the signal attenuates at higher frequencies.

Minimum amplitude of the signal is bigger in fig (b), compared to fig (a). Maximum amplitude remains the same in both the cases.

Low-pass filter:

After the averaging procedure, the transformed data cuts-off the high frequency signals and lets the low-frequency signals pass; as shown in figure (b).

This is exactly what a low-pass filter does. So, the name is appropriate.
