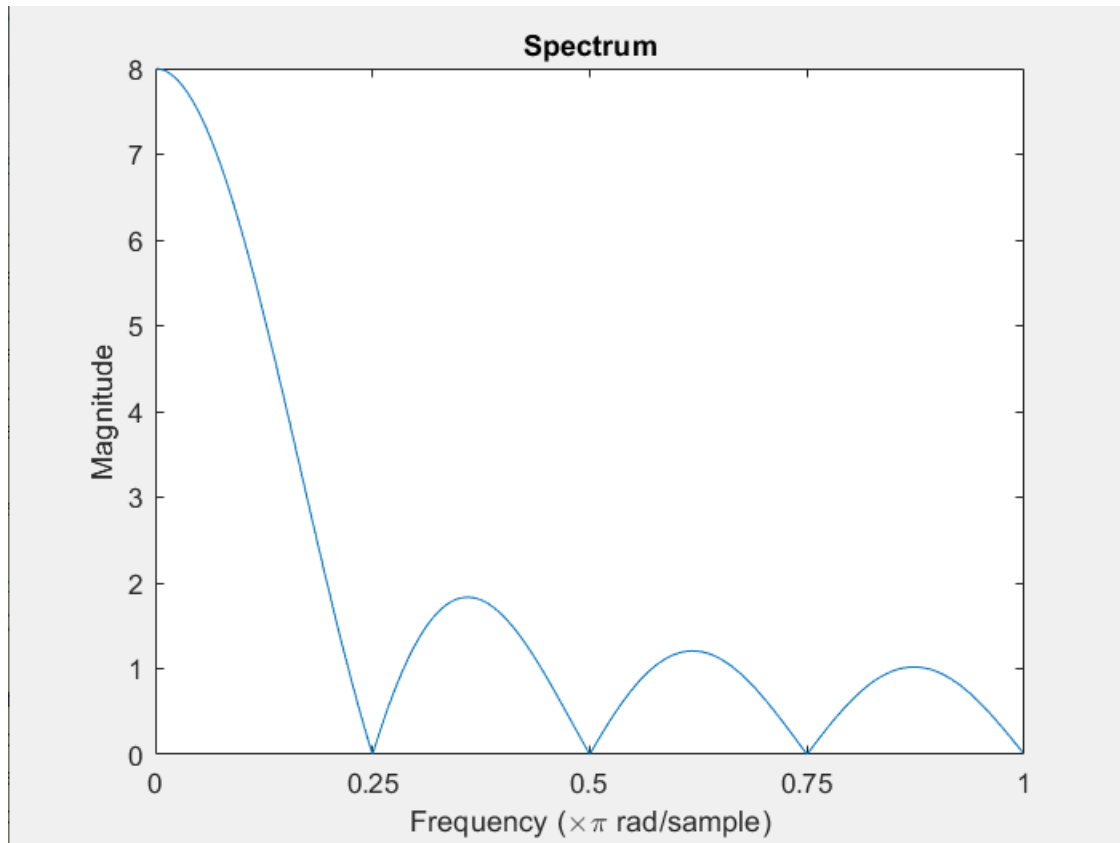
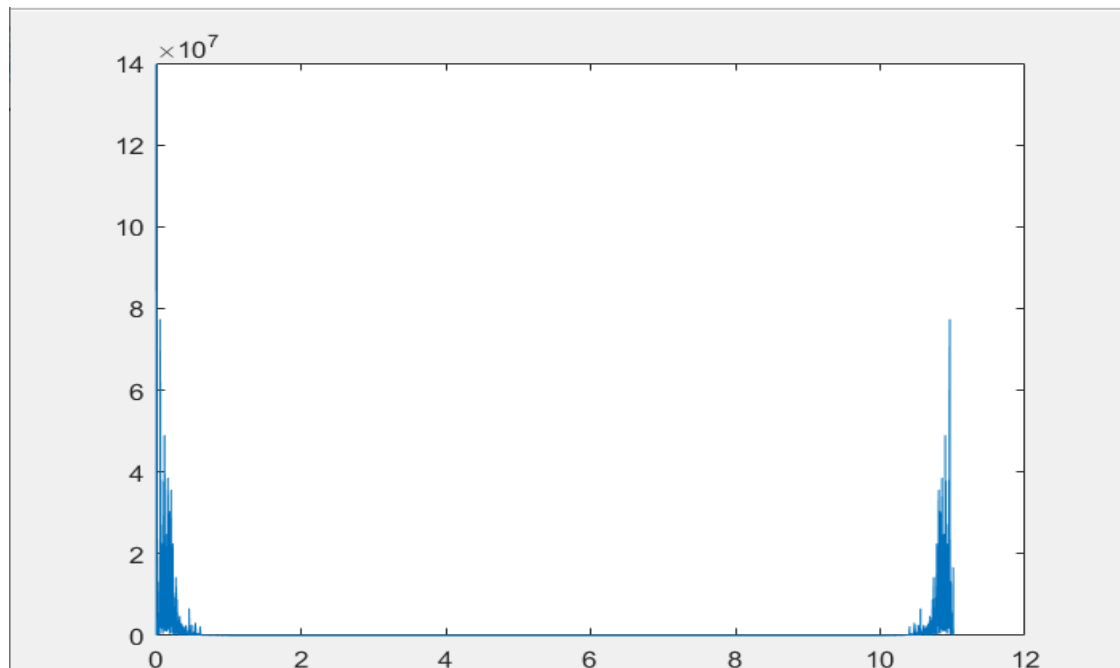


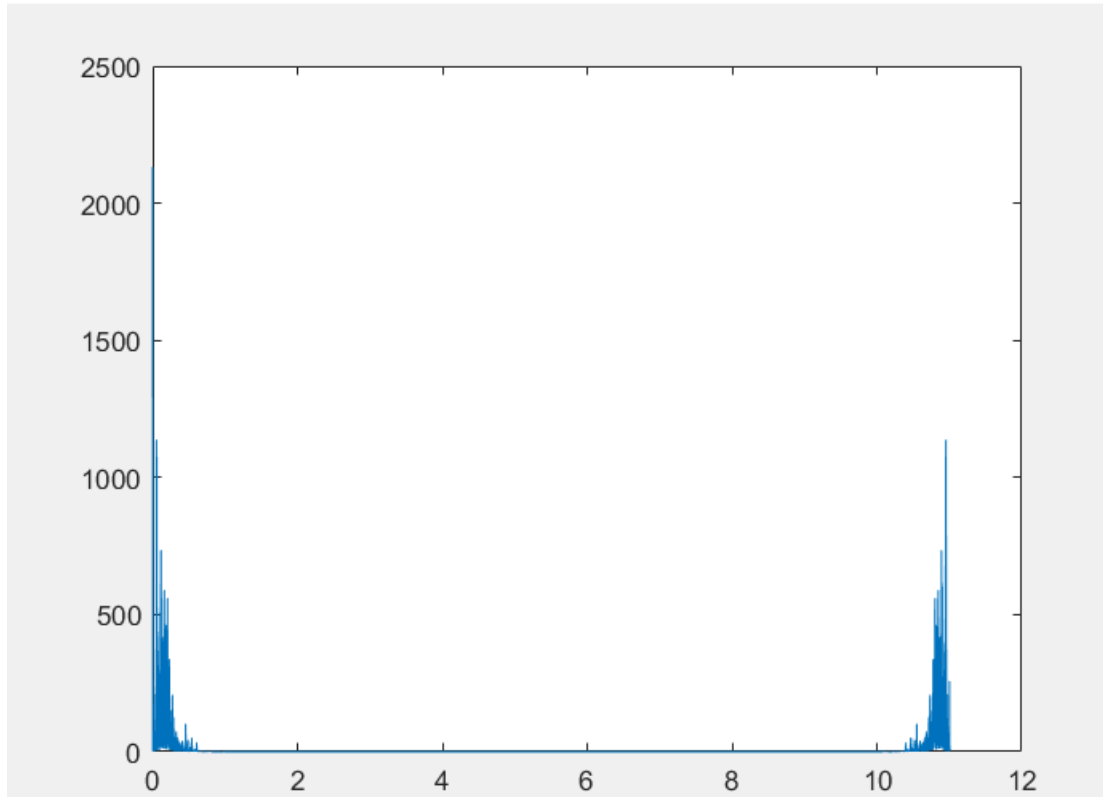
2. As you can see in the figure, it is a low pass filter:



3. Noise is attenuated step by step but the problem is the filter amplifies the low frequencies too much. The noise is filtered but the output audio is not clear. You can see it in the below figure.



By modifying the coefficient of the filter, we can get clearer audio. I changed the coefficient from 1 to $\frac{1}{4}$ and you can see the output of the modified filter in the below figure:



**The outputs of the initial filter are saved in the format of “filtered α .wav” where α is a number between 1 to 8.

The outputs of the modified filter are saved in the format of “filtered α Plus.wav” where α is a number between 1 to 8.