Customer requirements – Signal processing

1. The system must be able to read a signal of voltage form the excel file,
2. The system shall filter the signal to remove high frequencies
3. The system must apply fast Fourier transform to original signal
4. The system must apply fast Fourier transform to filtered signal,
5. The system must show four graphs in a single window
6. The system shall save the image automatically in the same folder where the code is placed.
7. The process previously described must be repeated with fifteen different files with voltage information, the expectation is that the results are very similar in all tests.