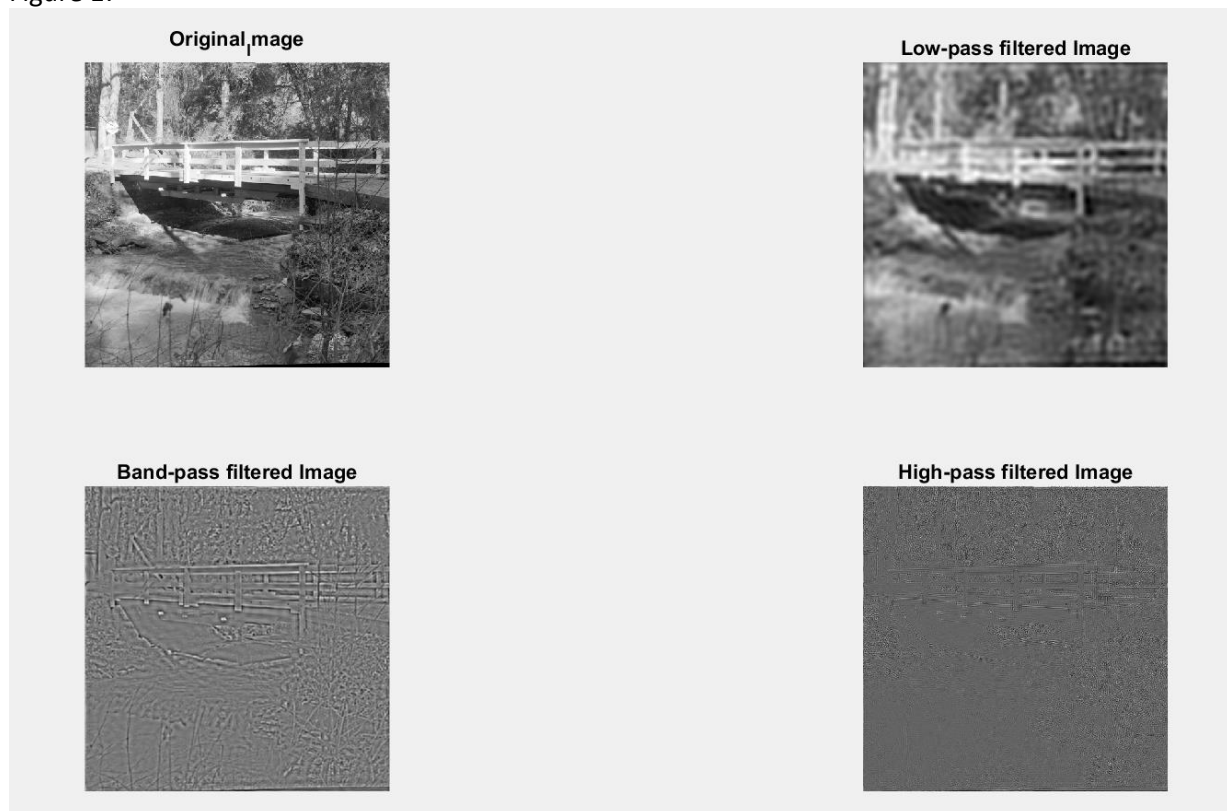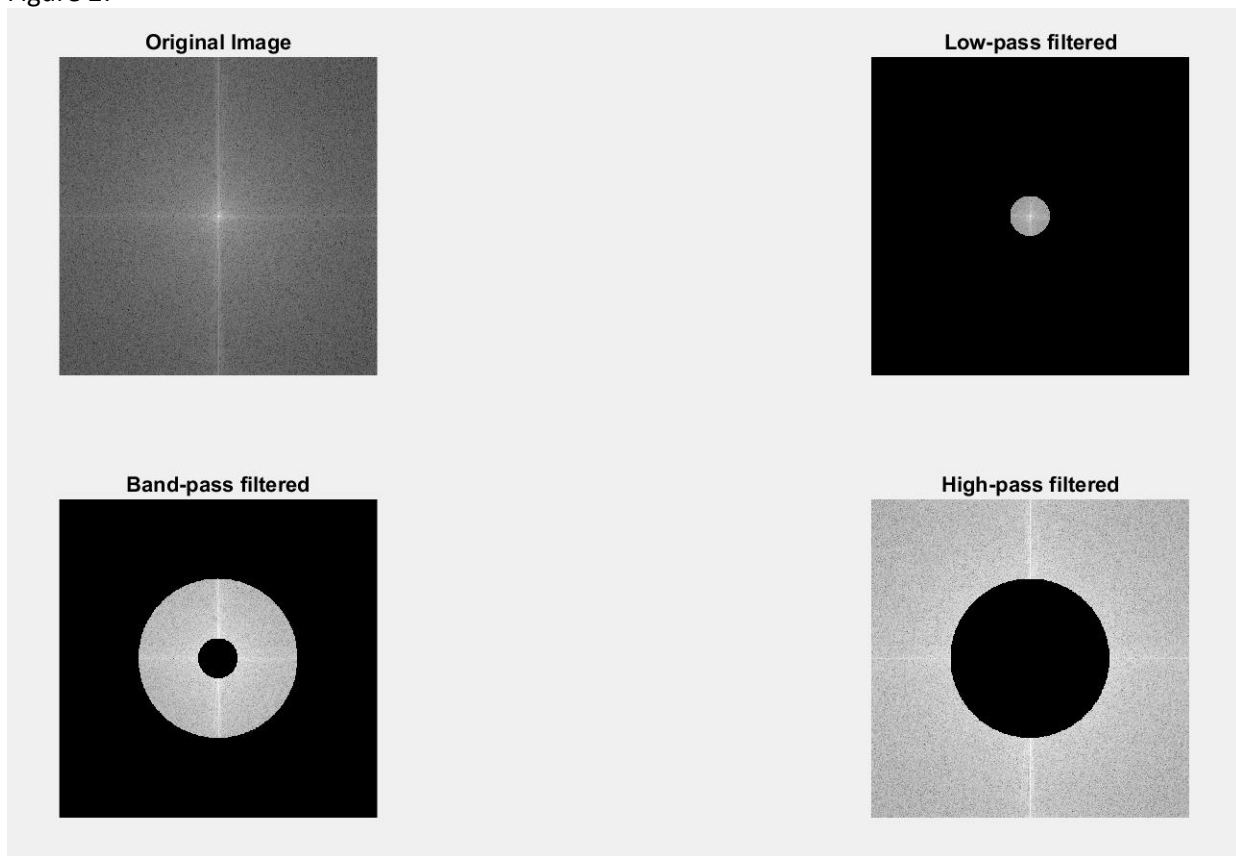Figure 1:

Figure 2:

Q3 Observation:
The low pass filter smoothens out the images by reducing the high-intensity pixels while leaving the low-intensity pixels alone. As can be seen from the amplitude response, pixels with a percent higher intensity than the cut-off value are masked out. Similarly, the high pass filter sharpens the image. By suppressing low Pixel intensities and reducing the percent intensity, the band pass filter improves the edges while minimizing noise. Extremely high pixel intensities smoothens out the image by filtering out all of the high frequency components after sending it through a low pass filter. The image is stripped of all low frequency components after going through a high pass filter, leaving just the edges.