Suppose that you have an image $f(x, y)$. Now compute the output image $g(x, y)$ as follows:

$$G_1(u, v) = F(u, v)H_{lp}(u, v)$$

$$G_2(u, v) = F(u, v)H_{hp}(u, v)$$

$$g(x, y) = \mathcal{F}^{-1}[G_1(u, v) \times G_2(u, v)]$$

Here $H_{lp}(u, v)$ is the transfer function of a Butterworth lowpass filter with $n = 2$ and $D_0 = 15$ and $H_{hp}(u, v)$ is the transfer function of a Gaussian highpass filter with $D_0 = 15$. In the last step, perform all the necessary post processing. Finally, display the image $g(x, y)$ of exact size as the input image.