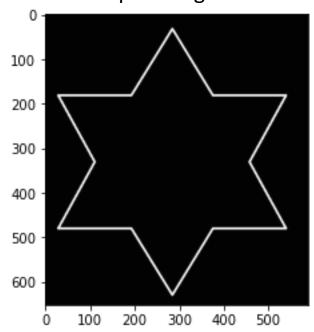
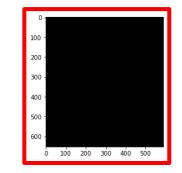
Input Image



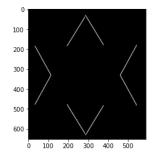
Filter =
$$\begin{bmatrix} 1 & 0 & -1 \\ 1 & 0 & -1 \\ 1 & 0 & -1 \end{bmatrix}$$

0 100 200 300 400 500

$$Filter_{sym} = \begin{bmatrix} 0 & 0 & 0 \\ 0 & 0 & 0 \\ 0 & 0 & 0 \end{bmatrix}$$

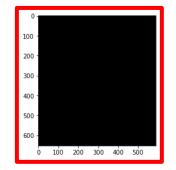


Filter =
$$\begin{bmatrix} 1 & 0 & -1 \\ 1 & 0 & -1 \\ 1 & 0 & -1 \end{bmatrix}$$
 Filter_{sym} =
$$\begin{bmatrix} 0 & 0 & 0 \\ 0 & 0 & 0 \\ 0 & 0 & 0 \end{bmatrix}$$
 Filter_{anti-sym} =
$$\begin{bmatrix} 1 & 0 & -1 \\ 1 & 0 & -1 \\ 1 & 0 & -1 \end{bmatrix}$$

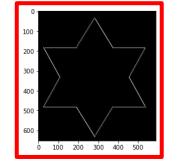


Filter =
$$\begin{bmatrix} -1 & 1 & 1 \\ -1 & 0 & 1 \\ -1 & -1 & -1 \end{bmatrix}$$

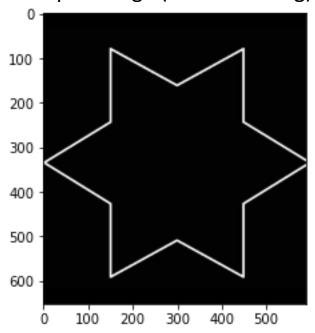
$$Filter_{sym} = \begin{bmatrix} -0.5 & 0 & -0.5 \\ 0 & 0 & 0 \\ -0.5 & 0 & -0.5 \end{bmatrix}$$



$$\text{Filter} = \begin{bmatrix} -1 & 1 & 1 \\ -1 & 0 & 1 \\ -1 & -1 & -1 \end{bmatrix} \quad Filter_{sym} = \begin{bmatrix} -0.5 & 0 & -0.5 \\ 0 & 0 & 0 \\ -0.5 & 0 & -0.5 \end{bmatrix} \quad Filter_{anti-sym} = \begin{bmatrix} -0.5 & 1 & 1.5 \\ -1 & 0 & 1 \\ -0.5 & 0 & -0.5 \end{bmatrix}$$

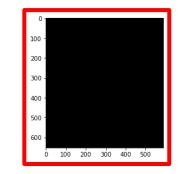


Input Image (rotated 90deg)

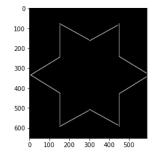


Filter =
$$\begin{bmatrix} 1 & 0 & -1 \\ 1 & 0 & -1 \\ 1 & 0 & -1 \end{bmatrix}$$

$$Filter_{sym} = \begin{bmatrix} 0 & 0 & 0 \\ 0 & 0 & 0 \\ 0 & 0 & 0 \end{bmatrix}$$

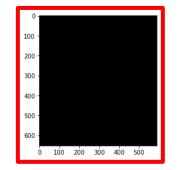


Filter =
$$\begin{bmatrix} 1 & 0 & -1 \\ 1 & 0 & -1 \\ 1 & 0 & -1 \end{bmatrix}$$
 Filter_{sym} = $\begin{bmatrix} 0 & 0 & 0 \\ 0 & 0 & 0 \\ 0 & 0 & 0 \end{bmatrix}$ Filter_{anti-sym} = $\begin{bmatrix} 1 & 0 & -1 \\ 1 & 0 & -1 \\ 1 & 0 & -1 \end{bmatrix}$



Filter =
$$\begin{bmatrix} -1 & 1 & 1 \\ -1 & 0 & 1 \\ -1 & -1 & -1 \end{bmatrix}$$

$$Filter_{sym} = \begin{bmatrix} -0.5 & 0 & -0.5 \\ 0 & 0 & 0 \\ -0.5 & 0 & -0.5 \end{bmatrix}$$



$$\text{Filter} = \begin{bmatrix} -1 & 1 & 1 \\ -1 & 0 & 1 \\ -1 & -1 & -1 \end{bmatrix} \quad Filter_{sym} = \begin{bmatrix} -0.5 & 0 & -0.5 \\ 0 & 0 & 0 \\ -0.5 & 0 & -0.5 \end{bmatrix} \quad Filter_{anti-sym} = \begin{bmatrix} -0.5 & 1 & 1.5 \\ -1 & 0 & 1 \\ -0.5 & 0 & -0.5 \end{bmatrix}$$

