

Step 3:- Through vertex '3'

$$\min(1, 1) = (0, 4) = 0$$

$$\min(1, 2) = (4, 2) = 2$$

$$\min(2, 1) = (2, 6) = 2$$

$$\min(2, 2) = (0, 4) = 0$$

Resultant matrix

$$\begin{bmatrix} 0 & 2 & 5 \\ 2 & 0 & 7 \\ -1 & -3 & 0 \end{bmatrix}$$