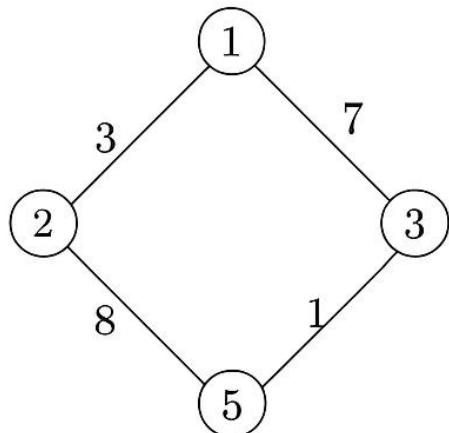


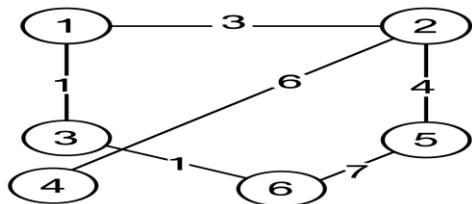
## 1 Floyd–Wahrshall algorithm

$$W = \begin{pmatrix} 0 & 3 & \infty & 7 & \infty \\ 8 & 0 & 2 & \infty & \infty \\ 5 & \infty & 0 & 1 & \infty \\ 2 & \infty & \infty & 0 & 1 \end{pmatrix}$$

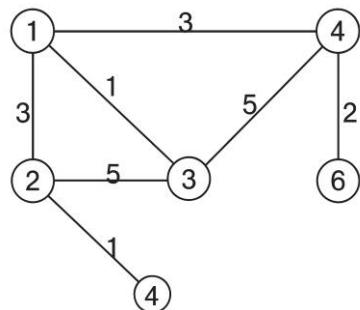


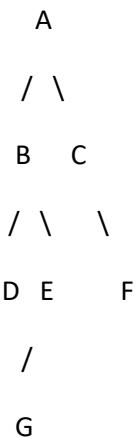
- (a) Run the Floyd–Warshall algorithm and give the final shortest-path distance matrix  $D$ .

2. Find the MST using prims algorithm



3. Find the MST using Kuruskal Algorithm.





Give Preorder, Inorder and Postorder traversals.