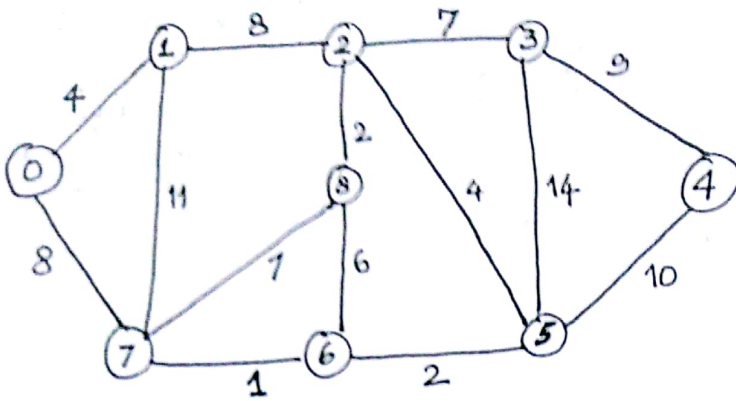
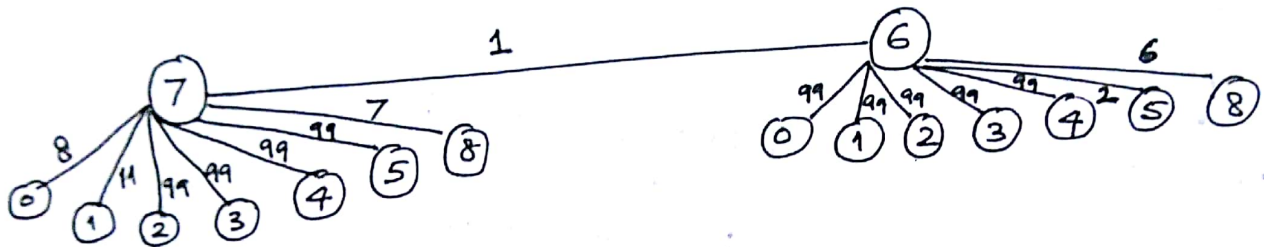


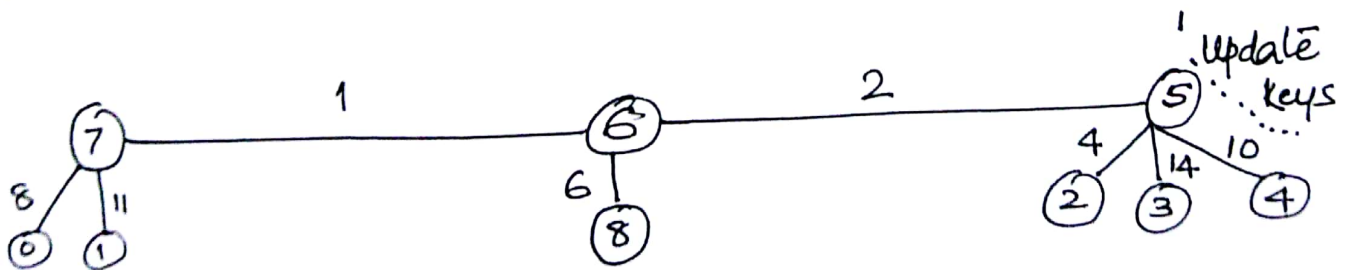
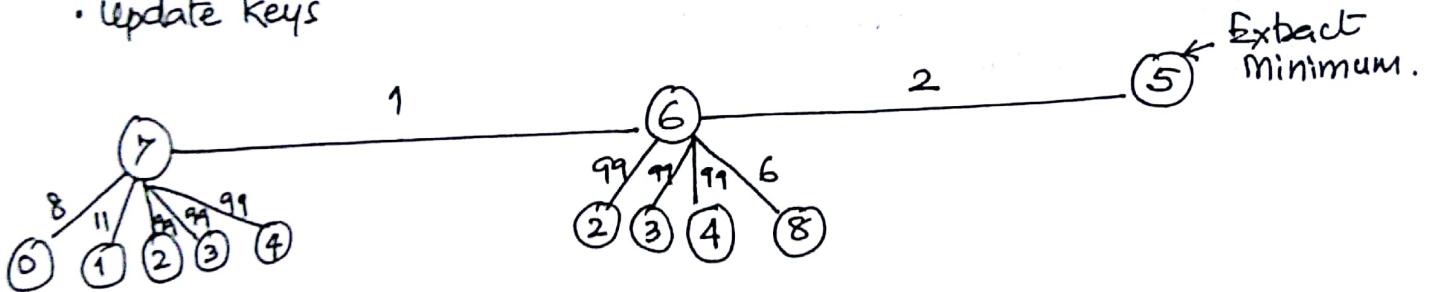
Ex: Spanning tree using HEAP structure.



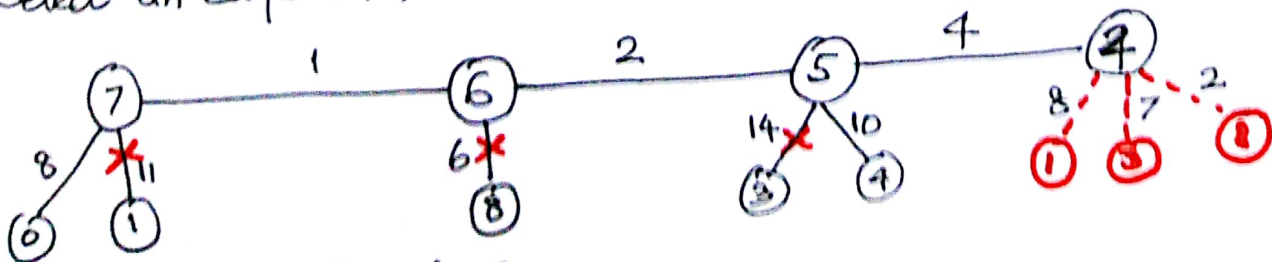
• Select an edge with minimum cost



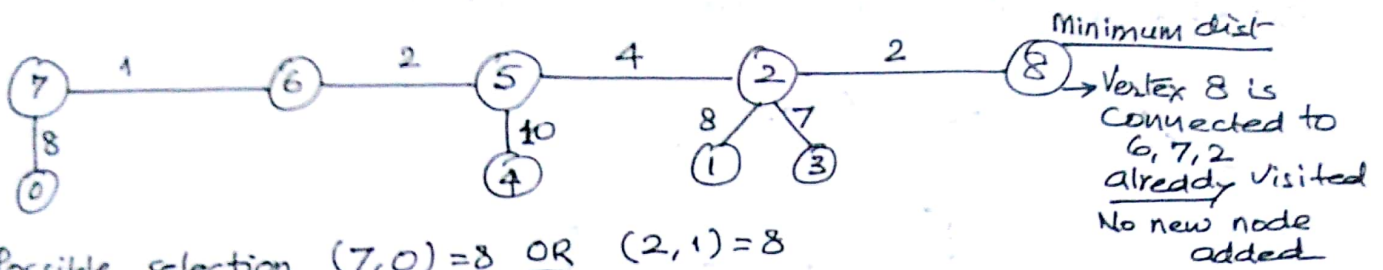
• Select edge $(6,5) = 2$ (Minimum) - Extract minimum.
 • Update keys



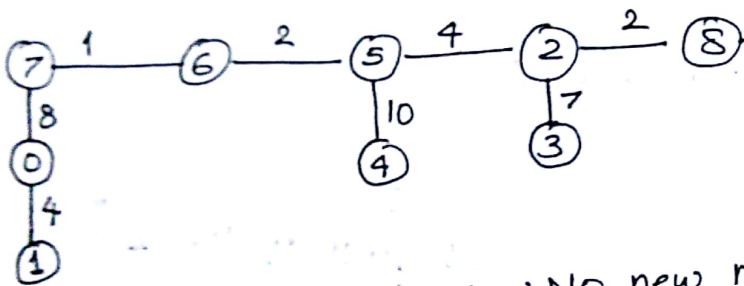
Select an edge $(5,2) = 4$



Select an edge $(2,8) = 2$



- possible selection $(7,0)=8$ OR $(2,1)=8$
- This generates two different spanning trees of same cost.
- Select an edge $(7,0)=8$



- Select an edge $(0,1)=4$: No new node is added as all nodes are already visited.
 - Select an edge $(2,3)=7$: Update distance $(3,4)=9$.
 - Finally select $(3,4)=9$.
- Total cost = 37 : Two different trees are possible.