Prim's Algorithm:- It is a greedy algorithm used to find MST→ Minimum spanning Tree for a weighted, undirected graph.
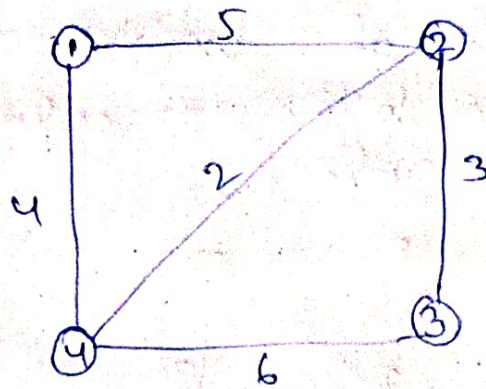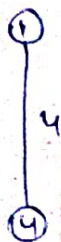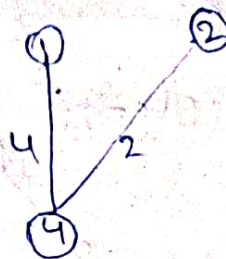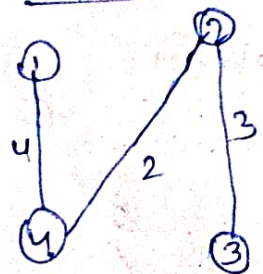

Step 1:

Step 2:-

Step 3:

Total weight: $(1-4) \rightarrow 4$

$(1,4-2) \rightarrow 2$

$(1,4,2-3) \rightarrow 3$

Total $= \underline{9}$

Note:- ~~Kruskal's~~

It starts with a single node and progessively adding the shortest edge that connects the current tree to a vertex not yet in tree.