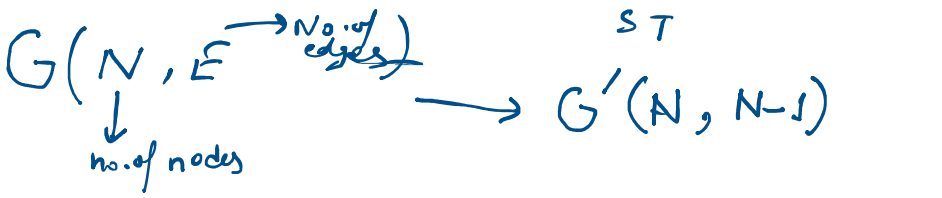
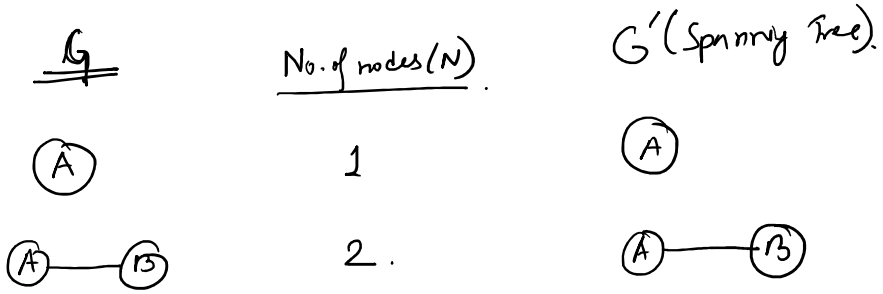
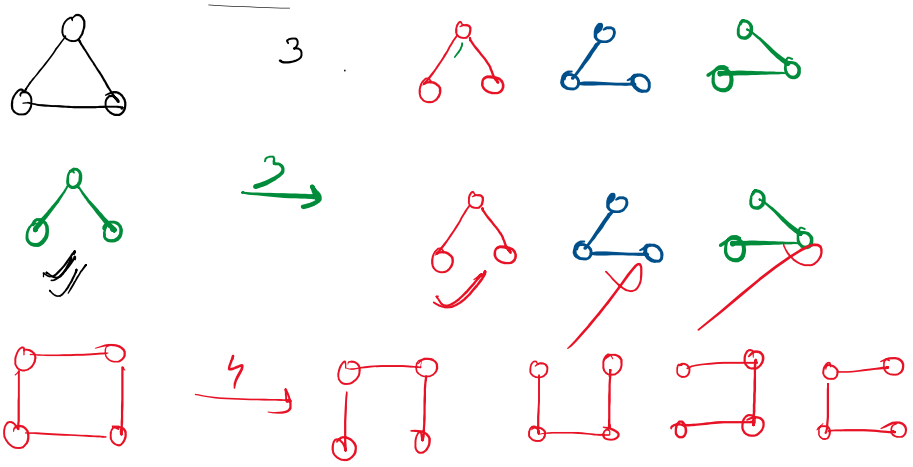
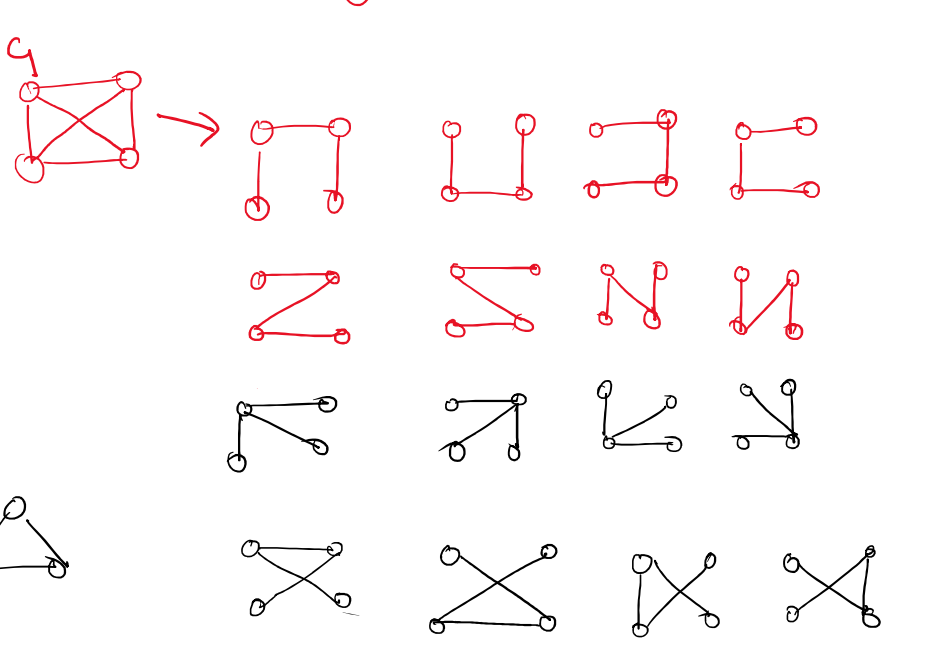
S section Spanning treee

28 March 2025 10:12

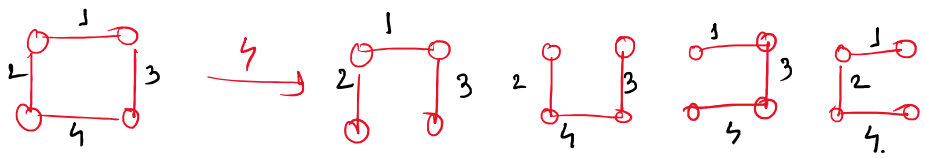






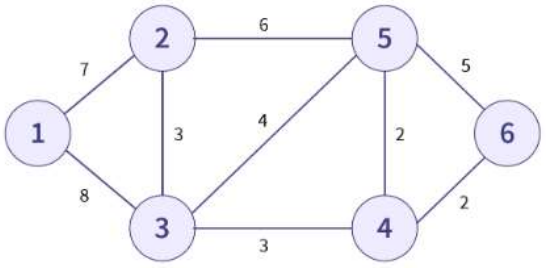


Minimum Spanning Tree.



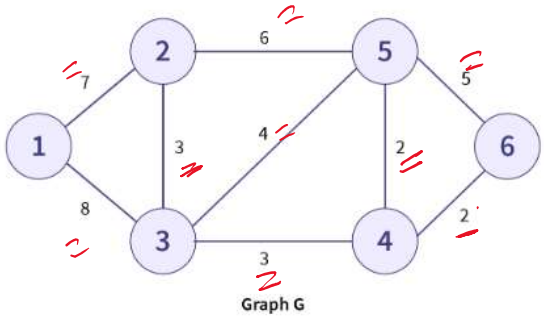
MST. (6) 9 8 7.

Kruskal's algorithm is a greedy algorithm in graph theory that is used to find the Minimum spanning tree.

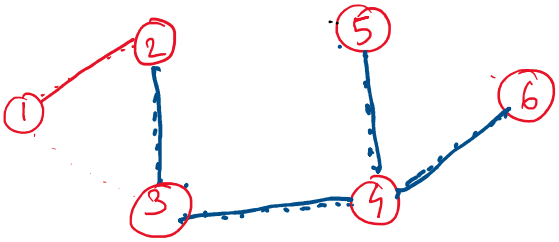


Graph G

- Sort all the edges of the graph in ascending order of their weights.
- Check the edge with minimum weight, if including it in the answer forms a cycle discard it, otherwise include it in the answer.
- Repeat the above step until we have chosen $V - 1$ edges.



Graph G



Node A	Node B	Wt
6	4	2
4	5	2
2	3	3
3	4	3
3	5	4 → Loop.
5	6	5 → Loop.
2	5	6 → Loop.
1	2	7.
1	3	8 → Loop.

17.