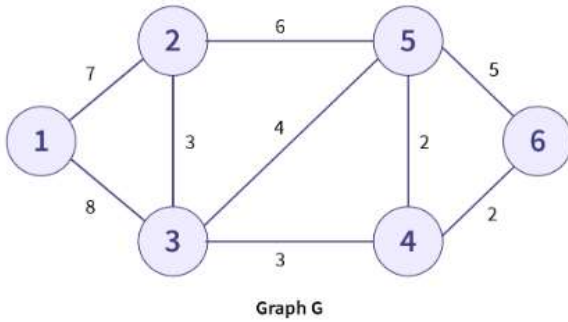


U section

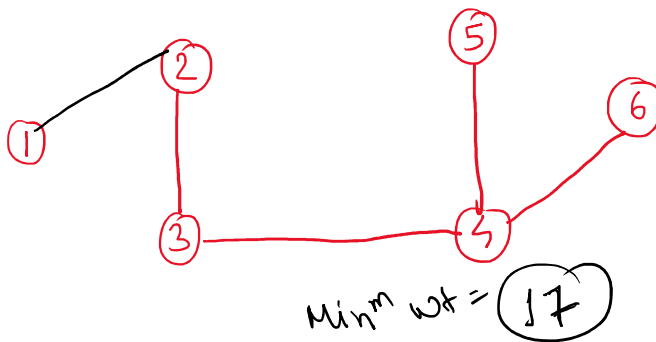
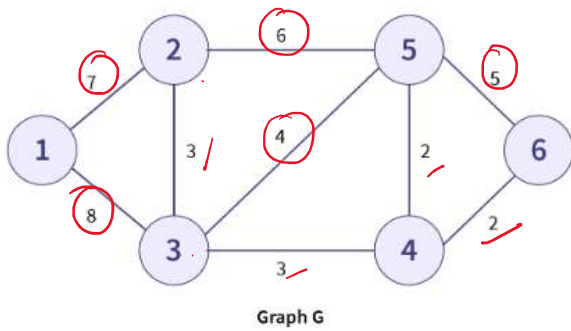
28 March 2025 08:07

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



✓ 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.



| No de From | Node To | weight |
|------------|---------|-----------|
| ✓ 4 | 6 | 2 |
| ✓ 4 | 5 | 2 |
| ✓ 3 | 4 | 3 |
| ✓ 3 | 2 | 3 |
| X 3 | 5 | 4 (cycle) |
| X 5 | 6 | 5 (cycle) |
| X 2 | 5 | 6 (cycle) |
| ✓ 1 | 2 | 7 |
| 1 | 3 | 8 |