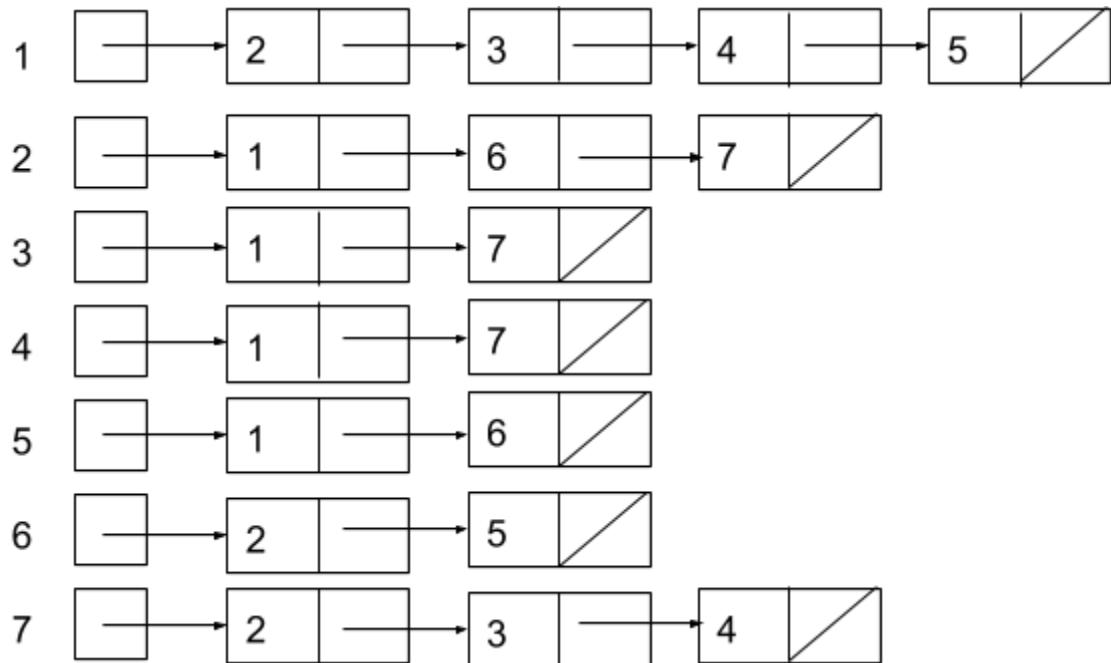


B.2.1

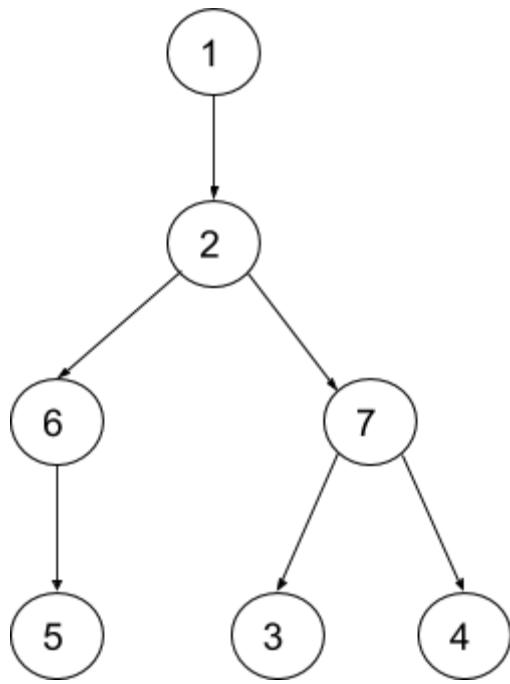
Adjacency Matrix

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 |
| 2 | 1 | 0 | 0 | 0 | 0 | 1 | 1 |
| 3 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| 4 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| 5 | 1 | 0 | 0 | 0 | 0 | 1 | 0 |
| 6 | 0 | 1 | 0 | 0 | 1 | 0 | 0 |
| 7 | 0 | 1 | 1 | 1 | 0 | 0 | 0 |

Adjacency Linked Lists



B2.2

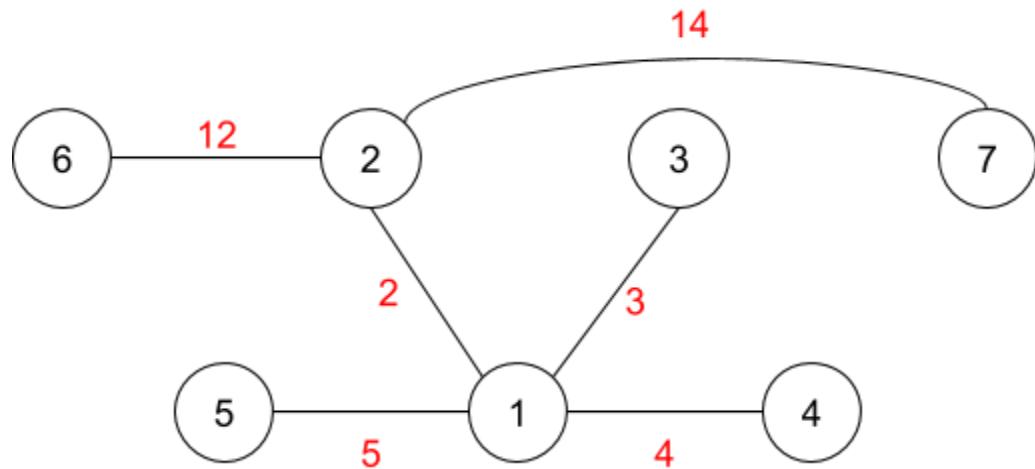


Order in which vertices were reached for the first time: $1 \rightarrow 2 \rightarrow 6 \rightarrow 5 \rightarrow 7 \rightarrow 3 \rightarrow 4$

Order in which vertices become dead ends: $5 \rightarrow 6 \rightarrow 3 \rightarrow 4 \rightarrow 7 \rightarrow 2 \rightarrow 1$

B2.3

Minimum Spanning Tree by Krusgal's Algorithm



Order in which edges are considered : $(1,2), (1, 3), (1, 4), (1, 5), (2, 6), (2, 7)$

Order in which edges are added to tree: same as above

Total weight = $2 + 3 + 4 + 5 + 12 + 14 = 40$