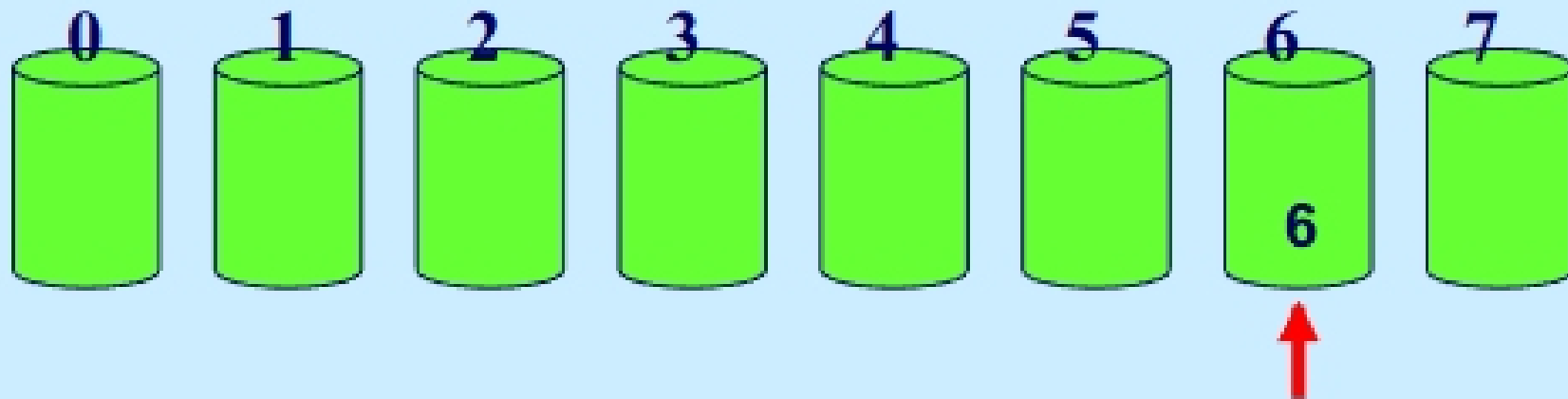
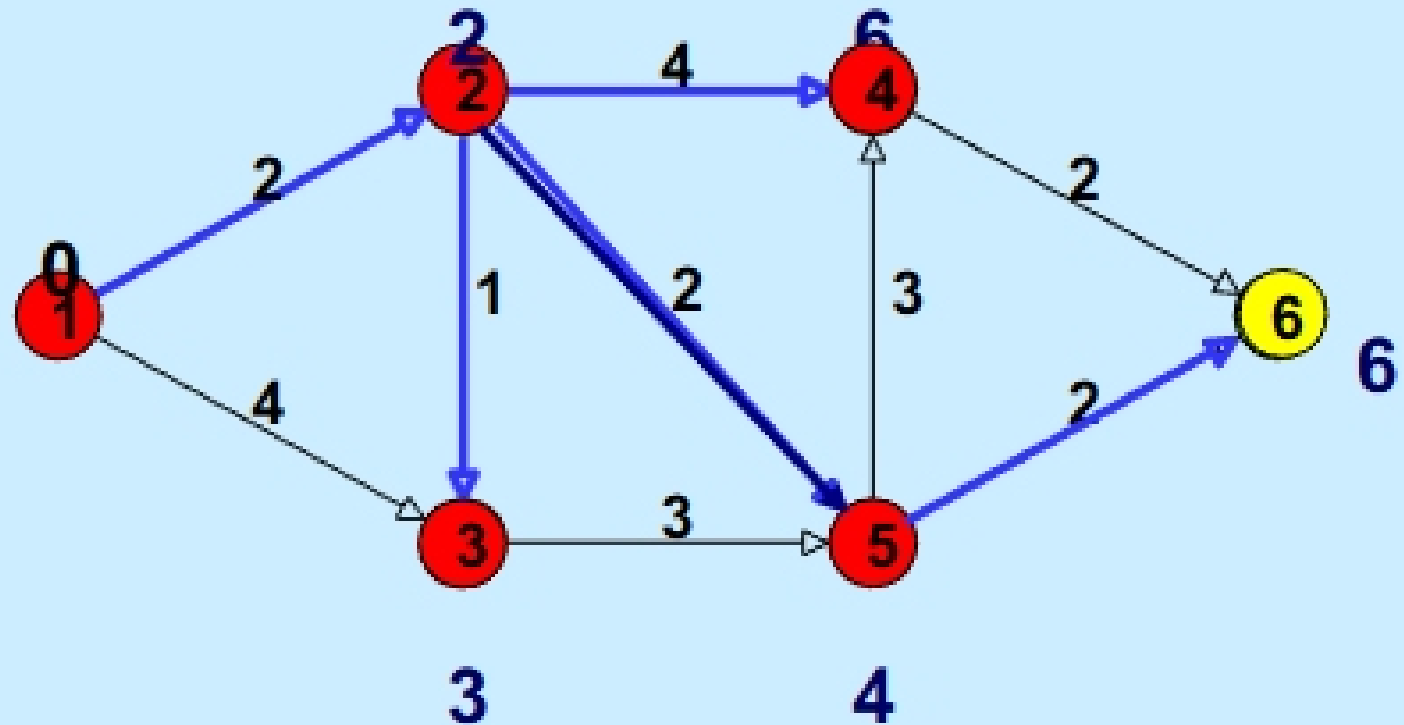
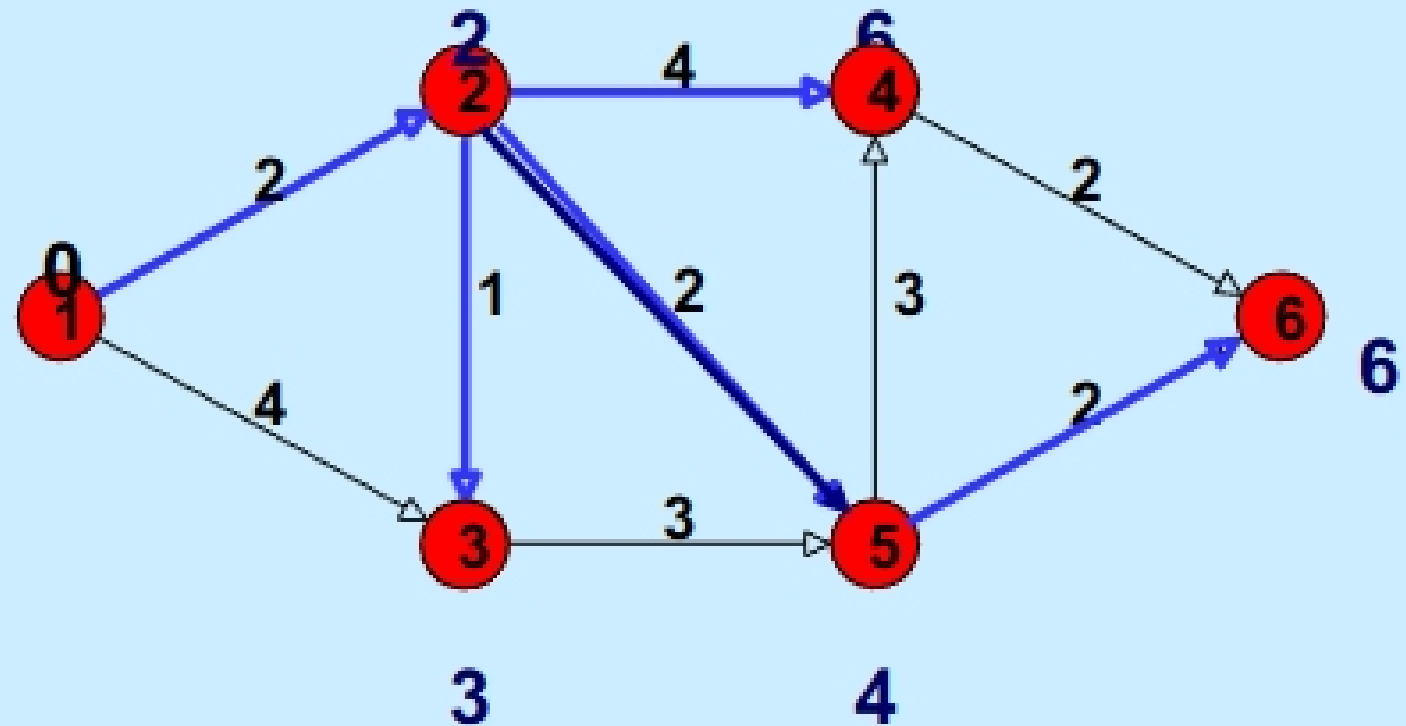


Choose Minimum Temporary Label

There is nothing to update



End of Algorithm



All nodes are now permanent

The predecessors form a tree

The shortest path from node 1 to node 6 can be found by tracing back predecessors

Running time for Dial's Algorithm

- ◆ Let C be the largest arc length (cost).
- ◆ Number of buckets needed. $O(nC)$
- ◆ Time to create buckets. $O(nC)$
- ◆ Time to update $d(\cdot)$ and buckets. $O(m)$
- ◆ Time to find min. $O(nC)$.
- ◆ Total running time. $O(m + nC)$.
- ◆ **This can be improved in practice.**