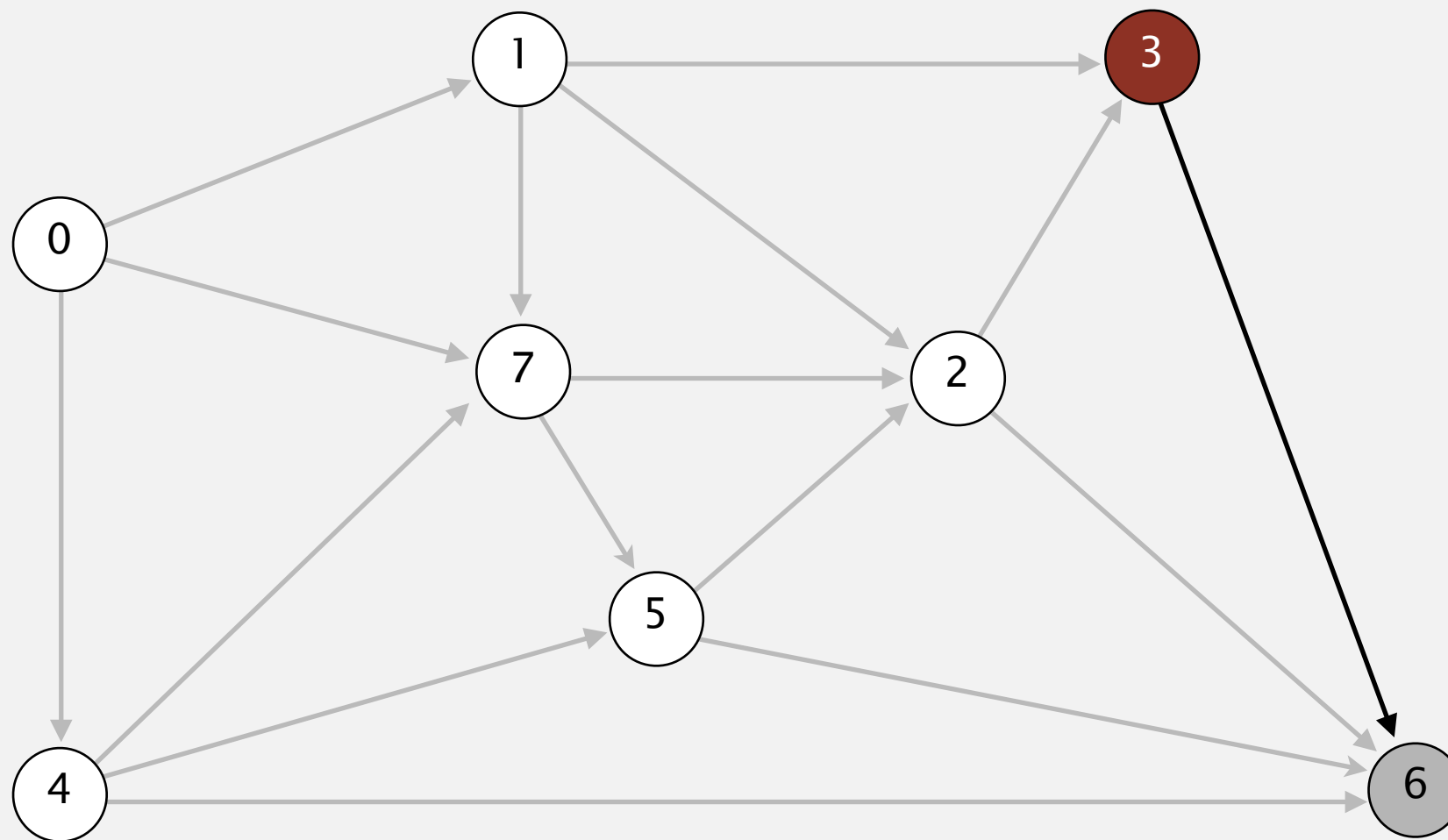


# Dijkstra's algorithm demo

- Consider vertices in increasing order of distance from  $s$  (non-tree vertex with the lowest `distTo[]` value).
- Add vertex to tree and relax all edges adjacent from that vertex.



| v   | distTo[] | edgeTo[] |
|-----|----------|----------|
| 0   | 0.0      | -        |
| 1   | 5.0      | 0→1      |
| 2   | 14.0     | 5→2      |
| → 3 | 17.0     | 2→3      |
| 4   | 9.0      | 0→4      |
| 5   | 13.0     | 4→5      |
| 6   | 25.0     | 2→6      |
| 7   | 8.0      | 0→7      |

**select vertex 3**