

Dijkstra's Algorithm

Single-source shortest paths problem

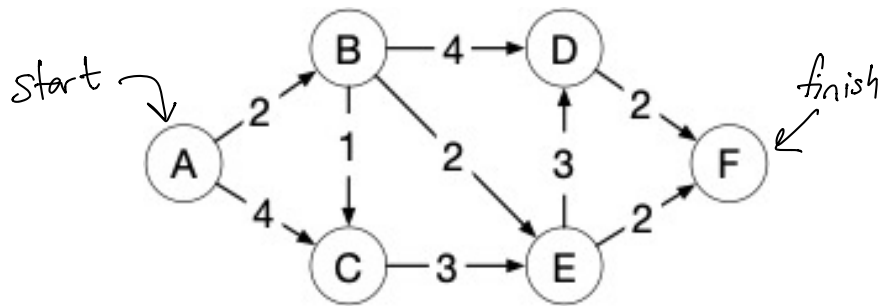
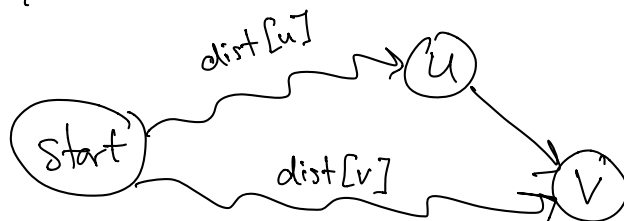


Table \rightarrow stores the fastest way to get from A to each other vertex

B	2
C	4
D	6
E	4
F	

- Keep a table of "best distance found so far from start node to each other node"
- Visit each node of our graph (in increasing order of distance away from the start vertex)
 - call ~~ea~~ node we're currently visiting: U.
 - look at all vertices connected to U.



if $\text{dist}[u] + \text{weight}(u, v) < \text{dist}[v]$