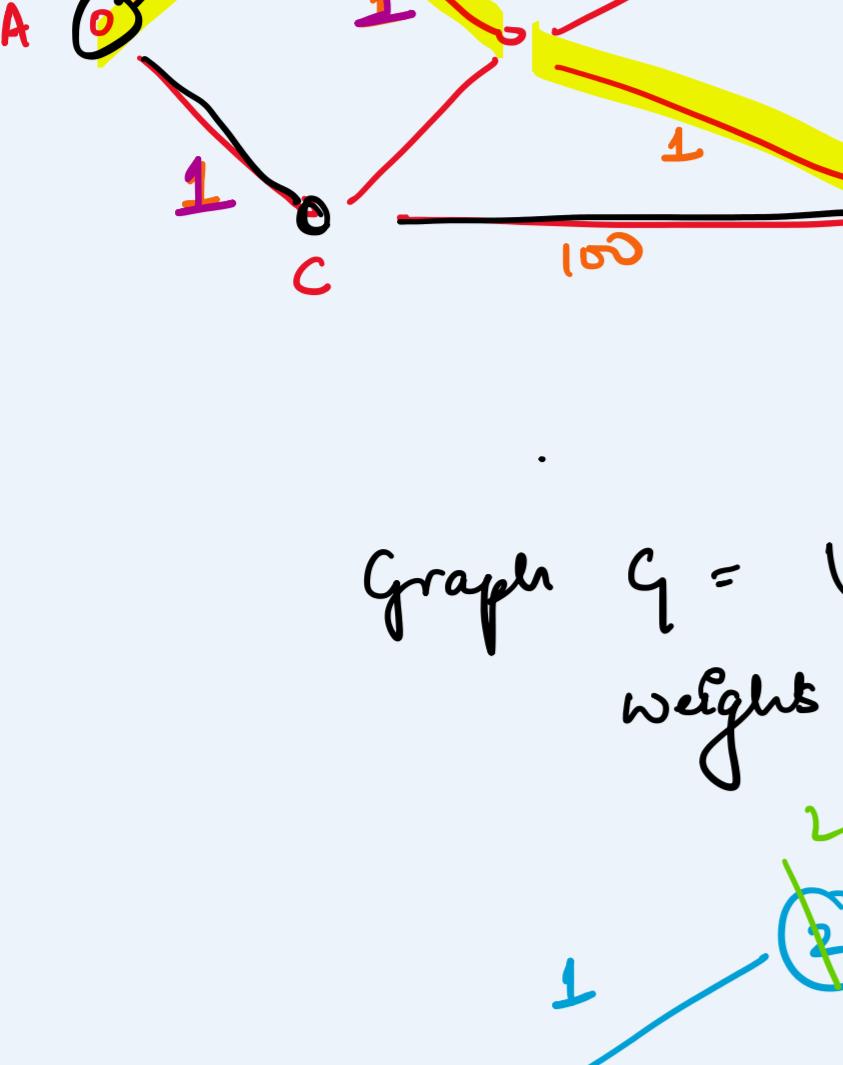


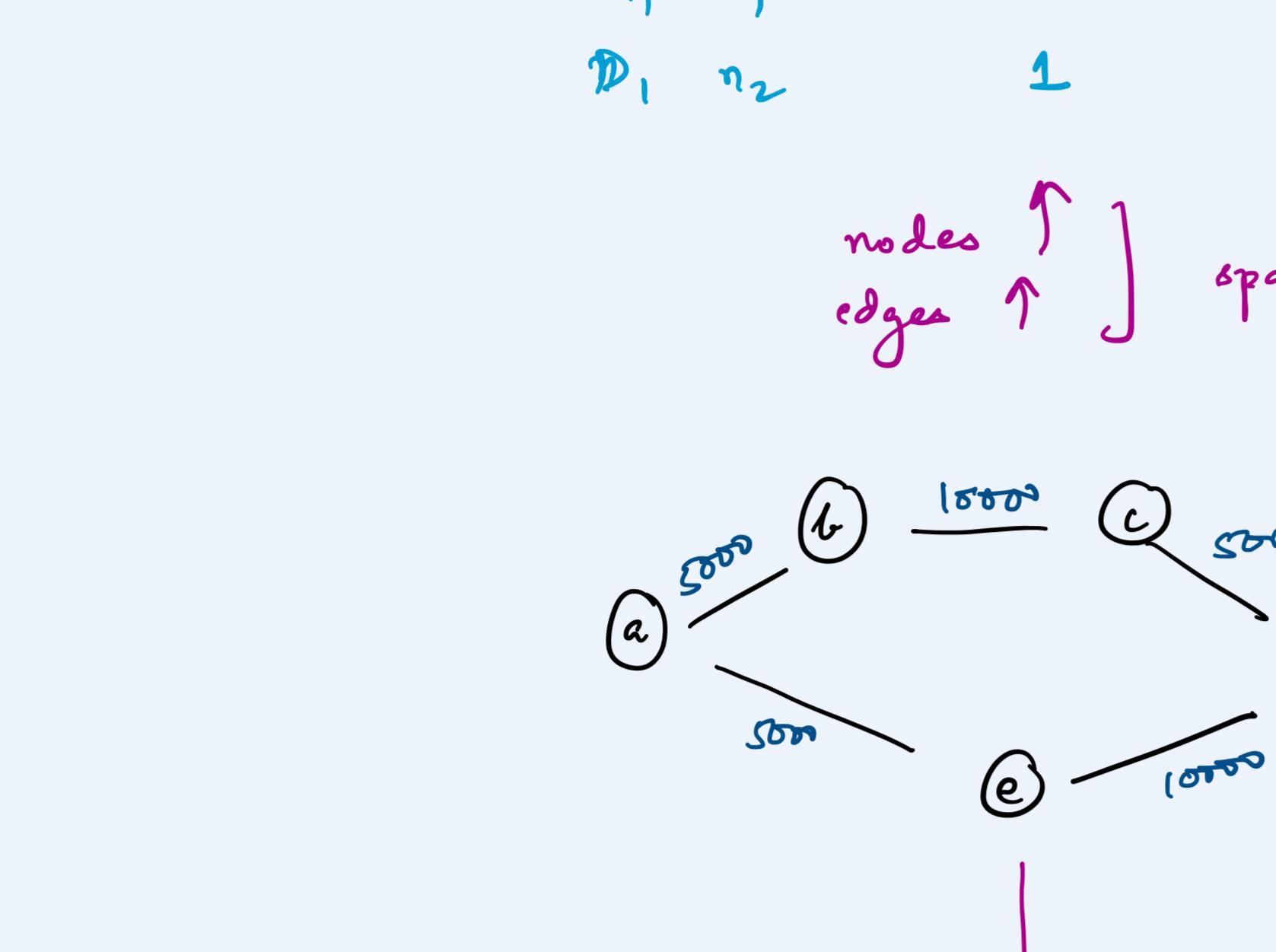
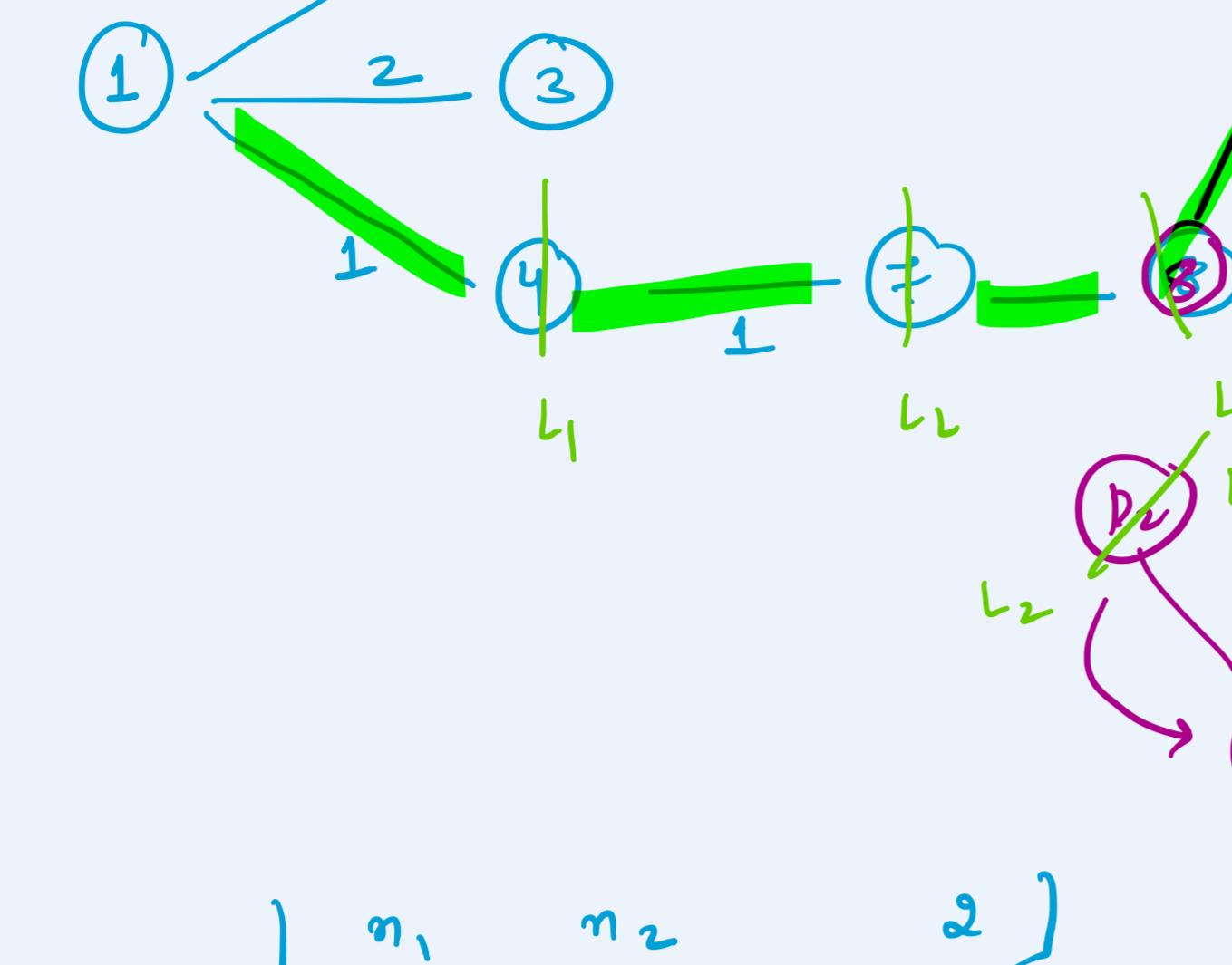
Graph traversals $\rightarrow$  BFS (level by level)

$\checkmark$  BFS can be used to find the shortest path between any two nodes.

↳ unweighted graphs

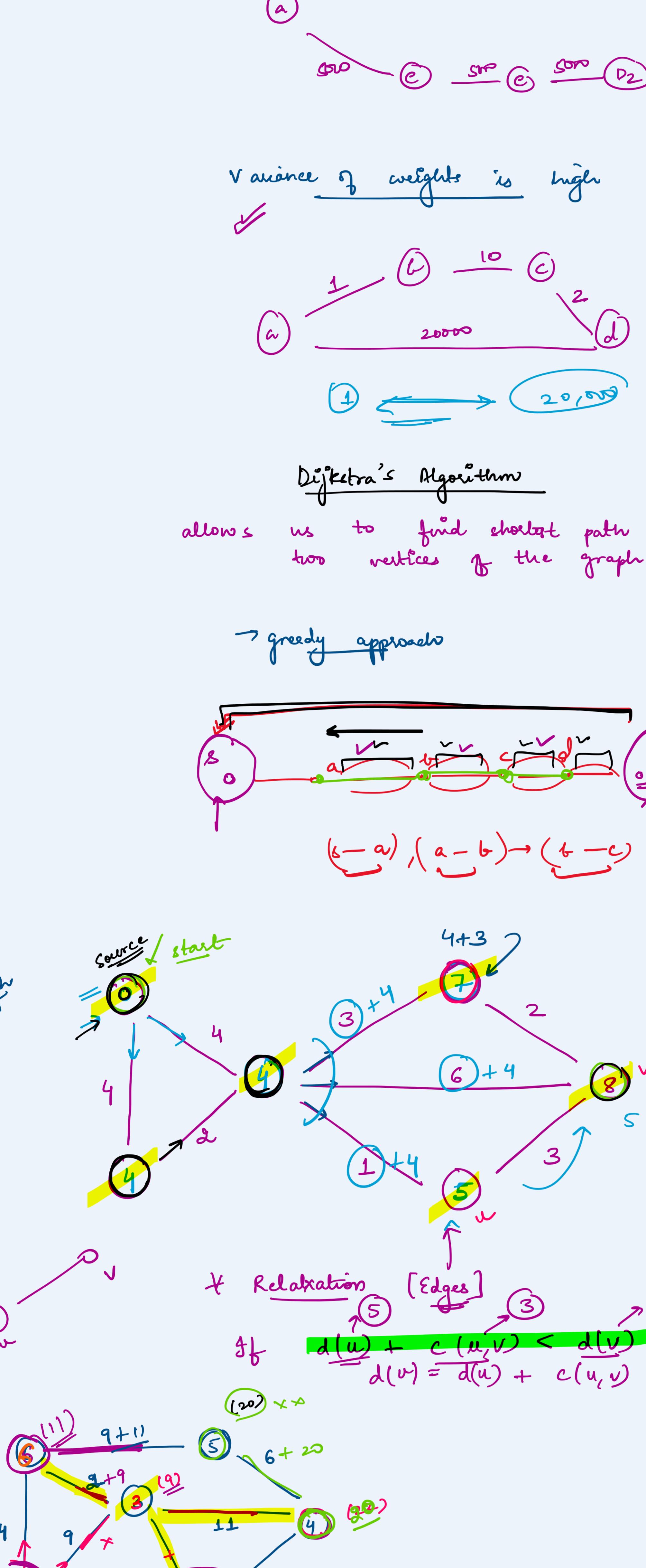


Shortest dist b/w src and dest



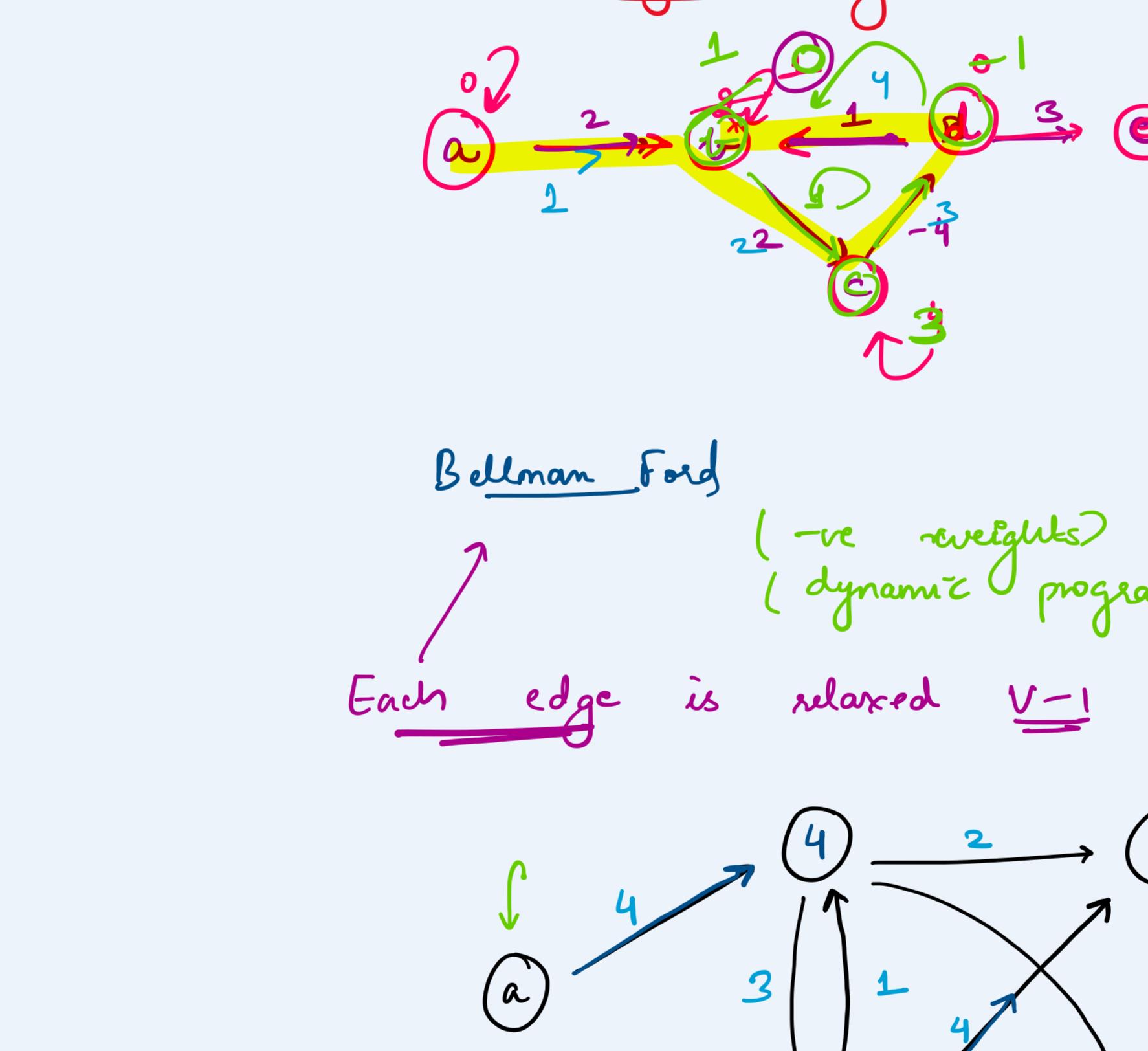
Cost  $\rightarrow 1 + 100 \rightarrow 101$

$\rightarrow 3$

Dijkstra's Algorithm

allows us to find shortest path b/w any two vertices of the graph.

$\rightarrow$  greedy approach



$\nexists$  Relaxation [Edges]

$$d(u) + c(u, v) < d(v) \Rightarrow d(v) = d(u) + c(u, v)$$

$d(u) = d(u) + c(u, v)$

$$d(v) = d(u) + c(u, v)$$

$d(v) = d(u) + c(u, v)$

$d(v) = d(u) + c(u,$