

Graphs:

Adj mat { Representation

Adj list { Representation

Traversal → BFS / DFS

Cycle Detection → Undirected (BFS) / Directed (DFS)

2 Question

i) No of nodes & edges

ii) Adj mat to Adj list

Graph Algorithms:

i) Topological sort → DAG (Linear Ordering)

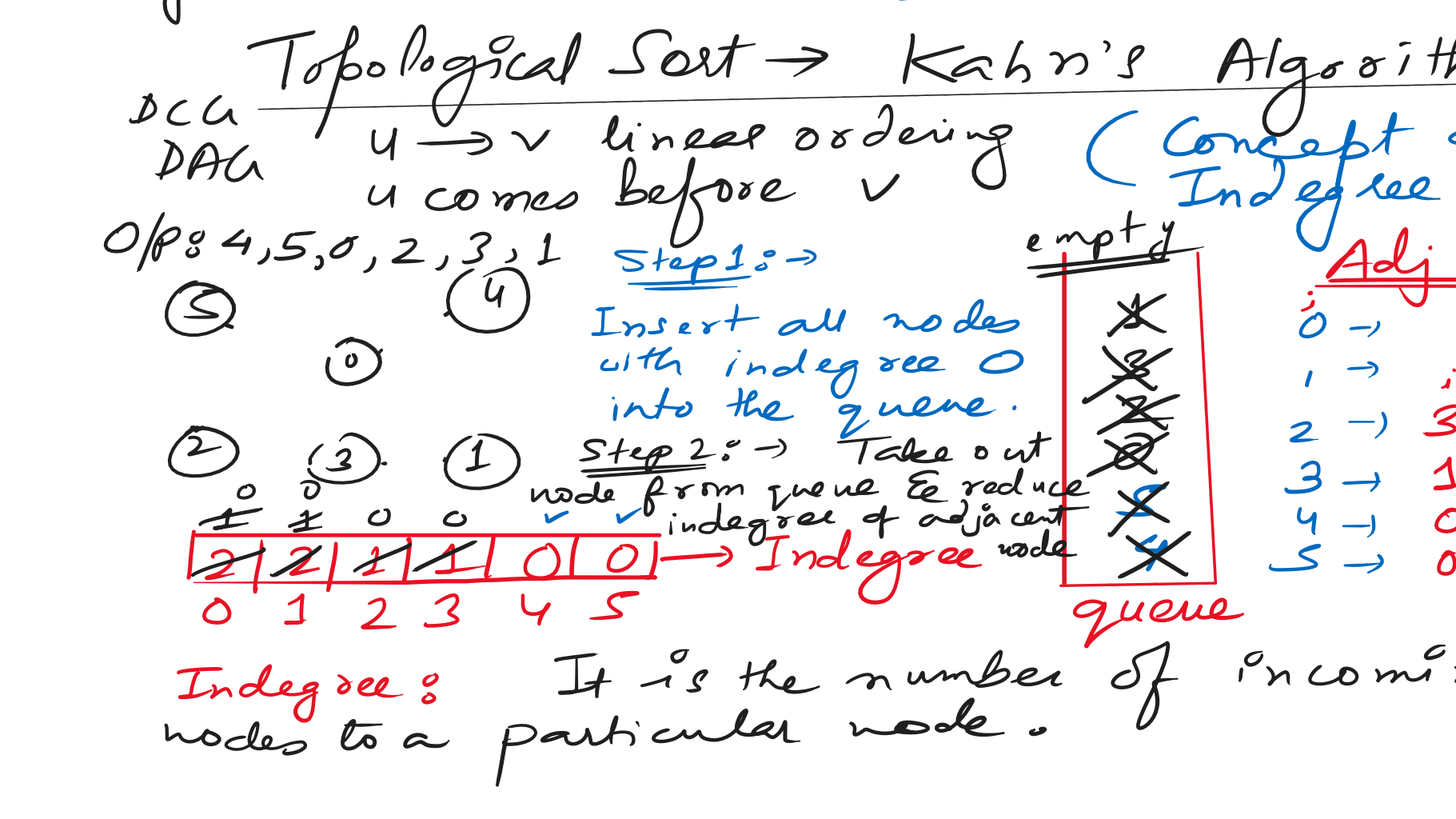
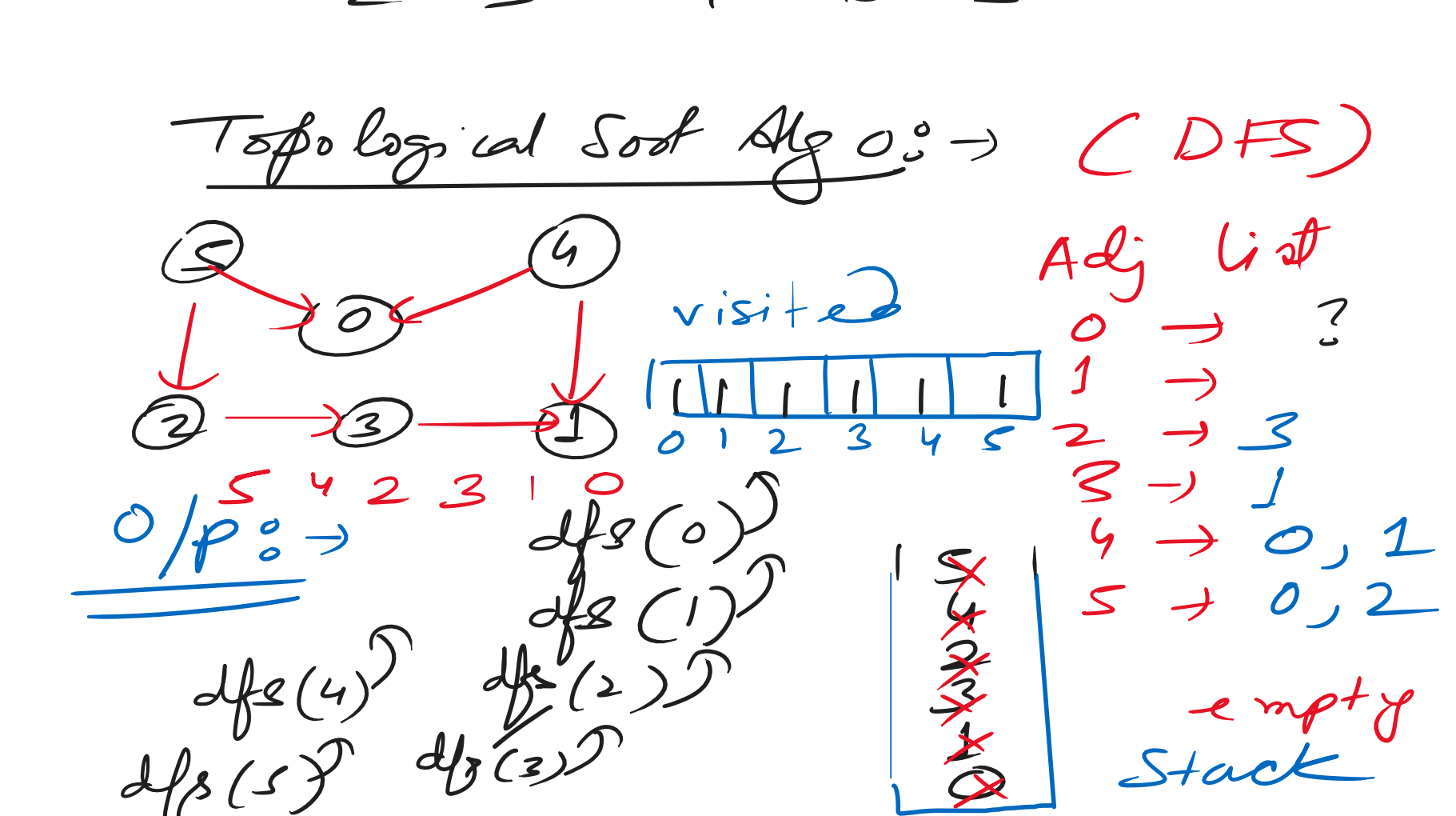
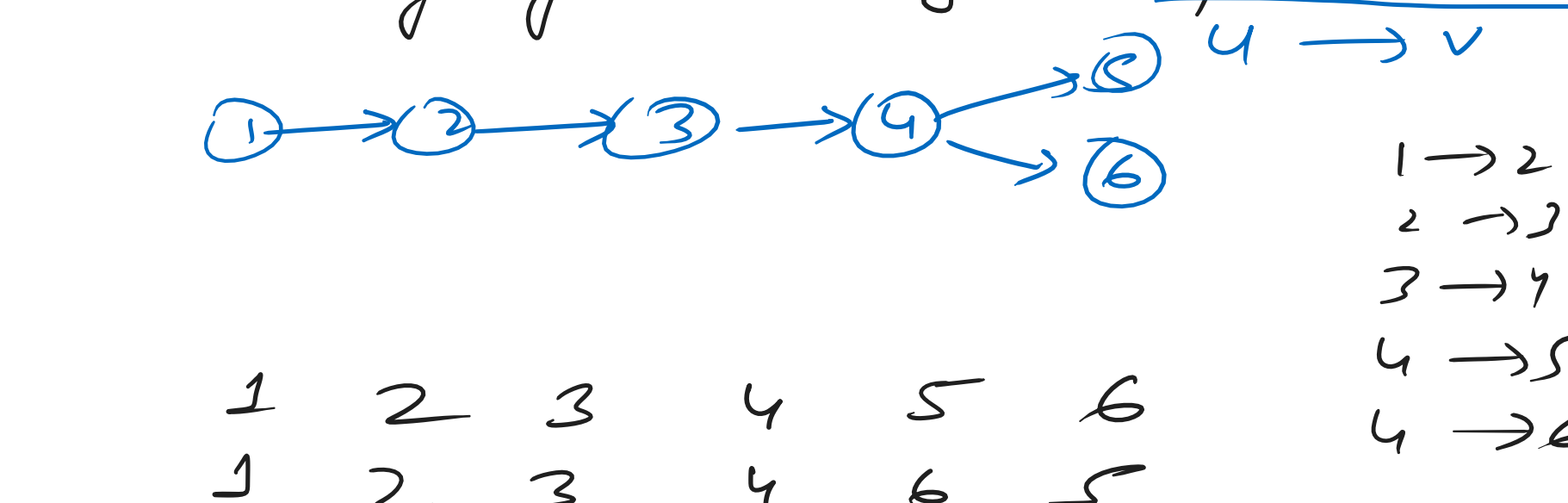
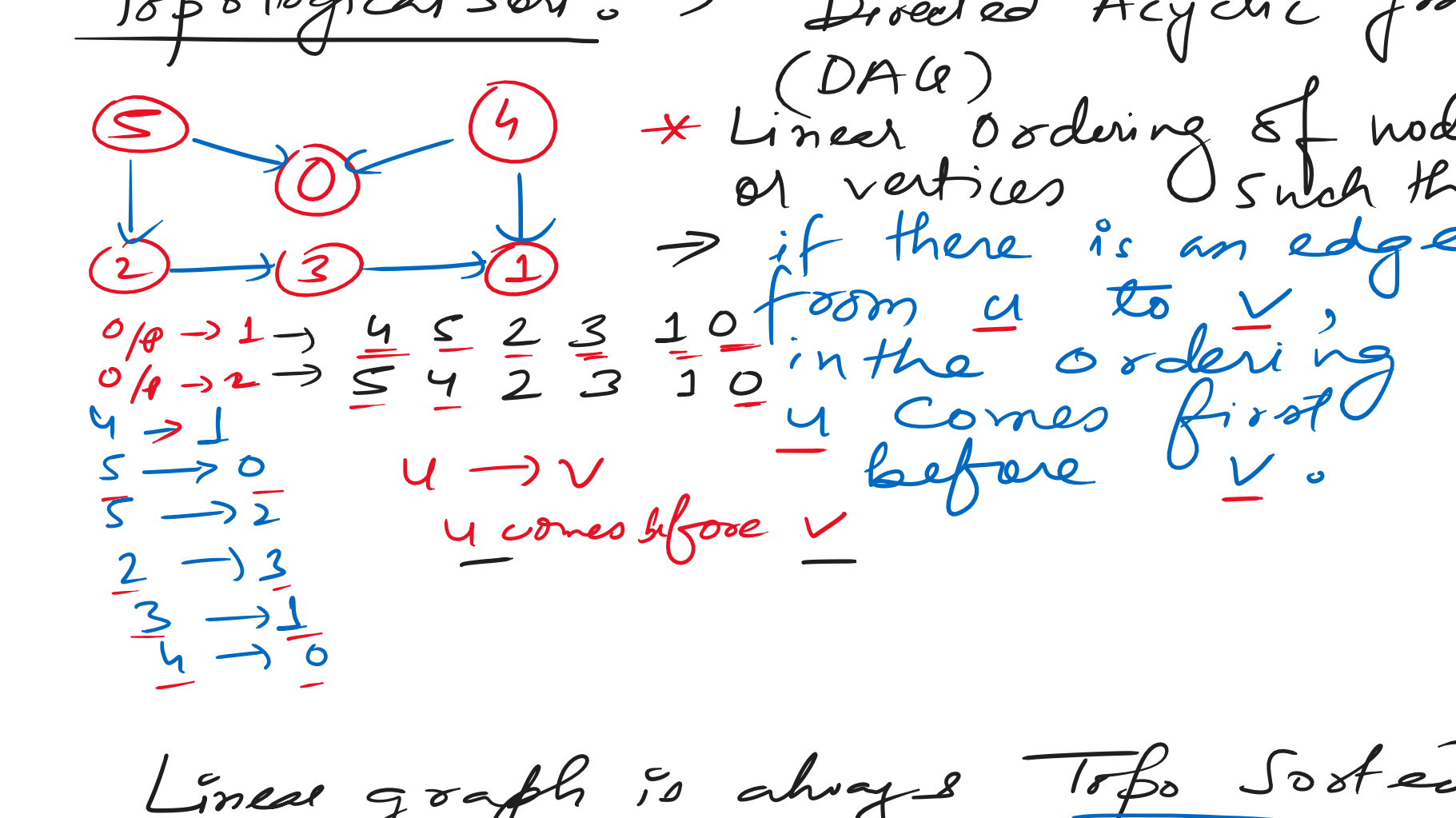
ii) Kahn's Algorithm (Indegree)

* Shortest distance

→ Dijkstra's

→ MST → Prim's

→ MST → Kruskal's (Disjoint Set)



Important point about Topo Sort → DAG Linear Ordering.

*** Interview Question: → If we cannot apply topo sort to a directed graph, what does it mean?

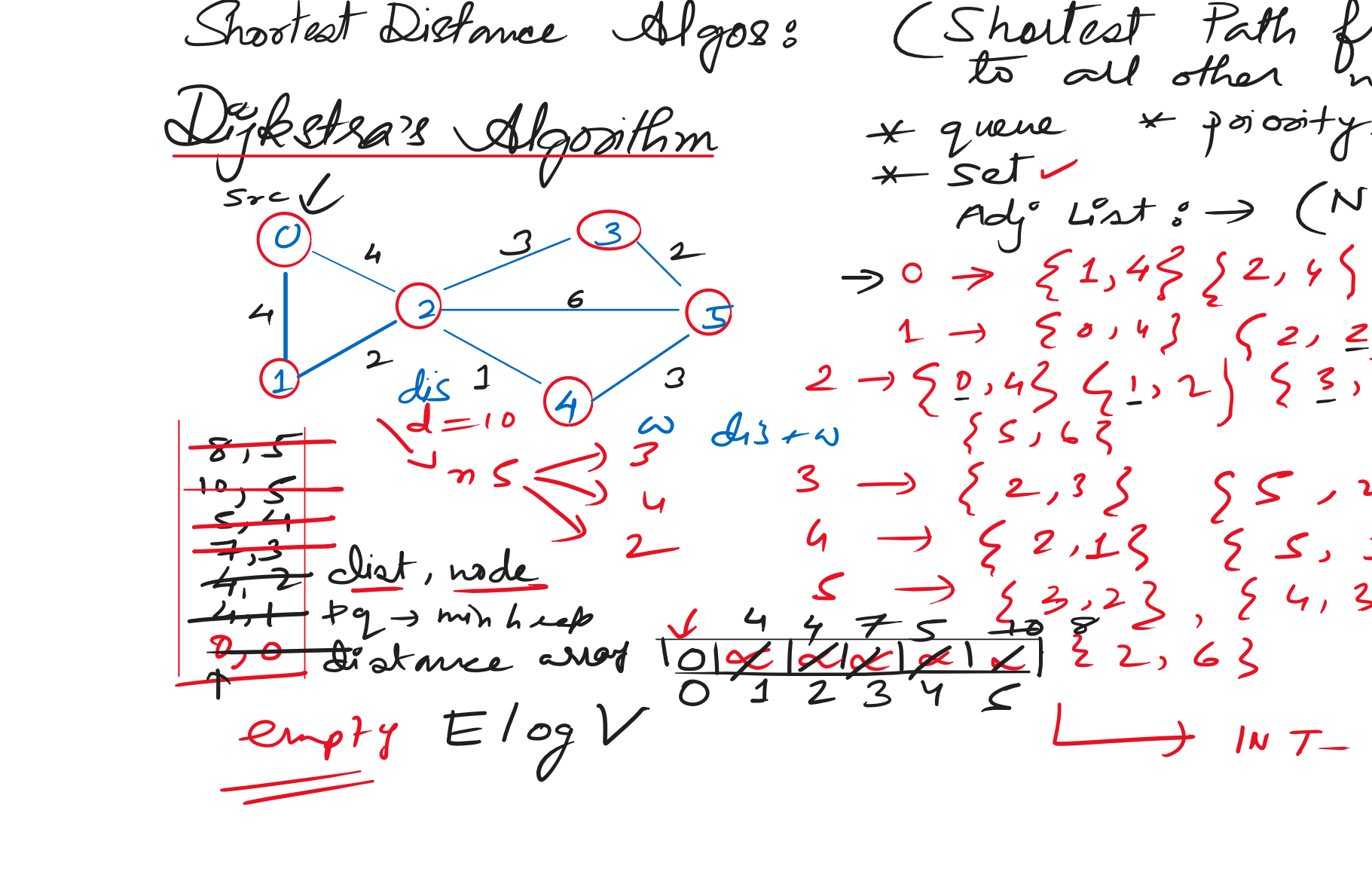
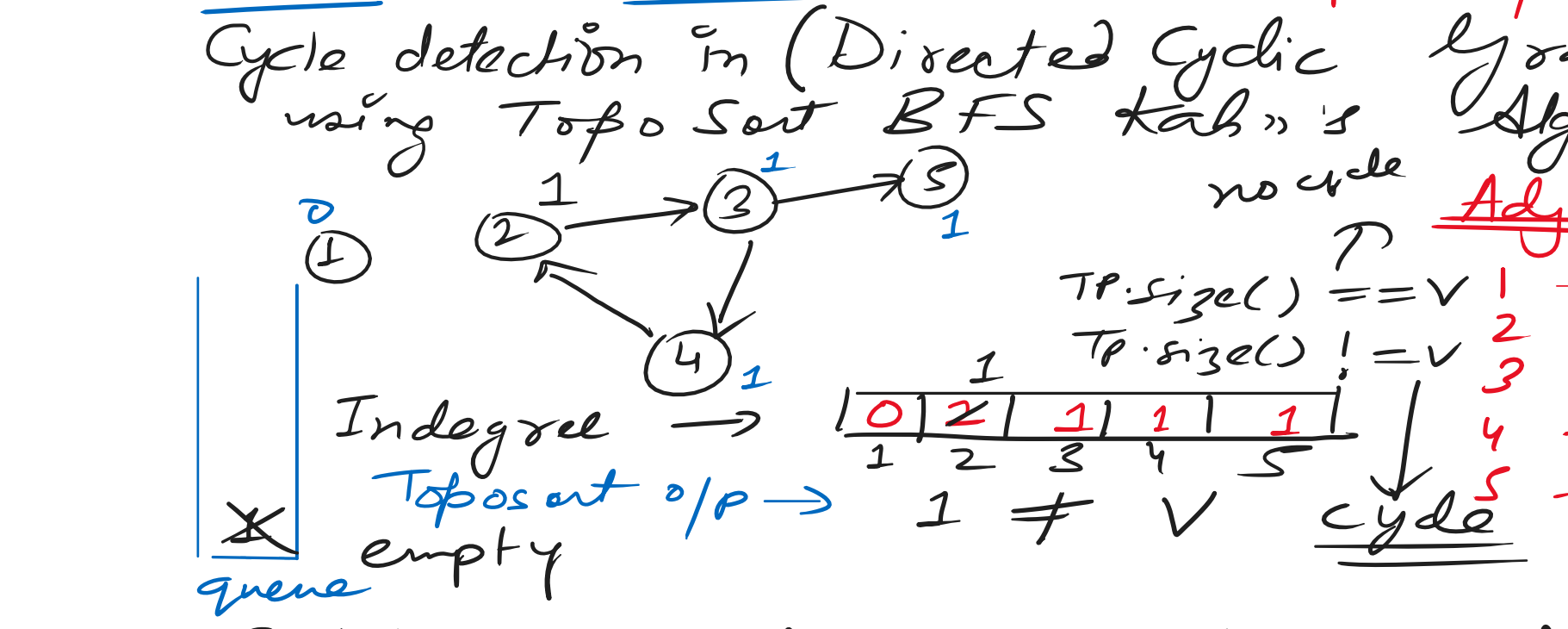
→ Cycle Detected !!! DAG

* When we are done with the linear ordering topo sort:

o/p arr / vector. size() == N or V

Mind Tree / Tech Mahindra / Pure Storage / Amazon

Visa / Standard Chartered / Wipro



Feedback: 11316