



Graphs 06

Graphs (Part 3)

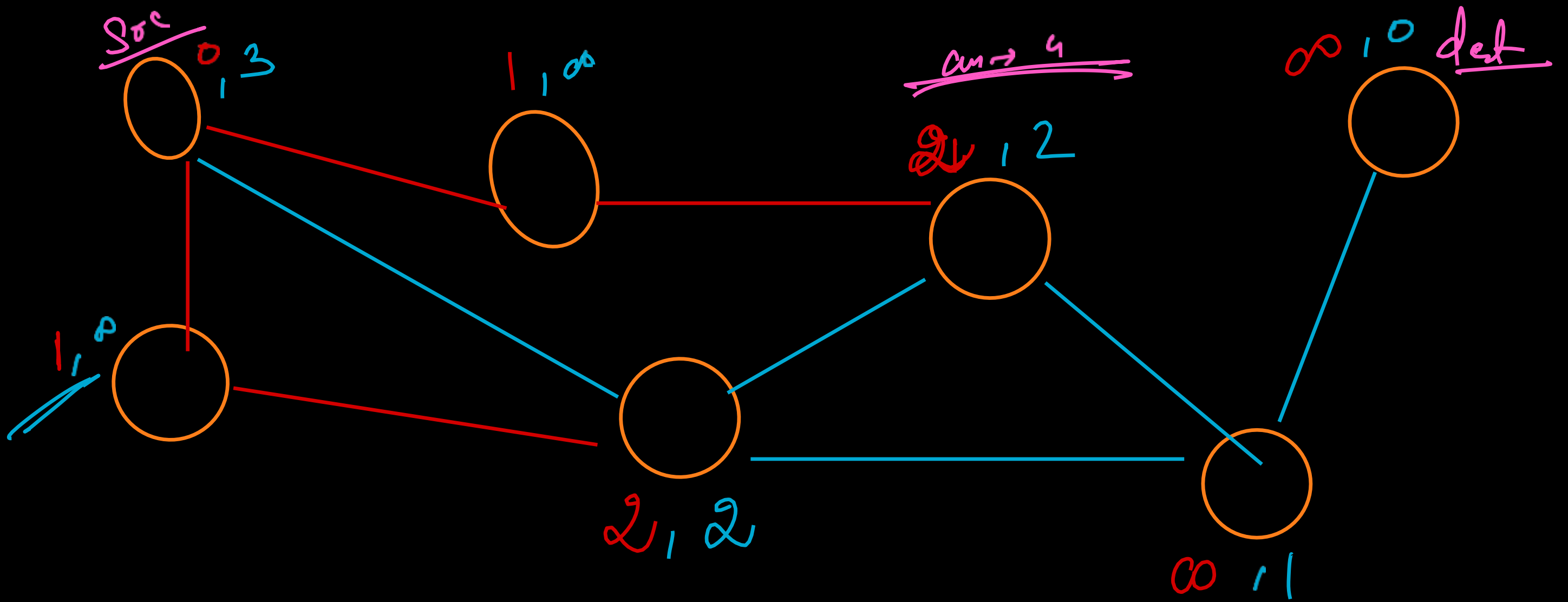


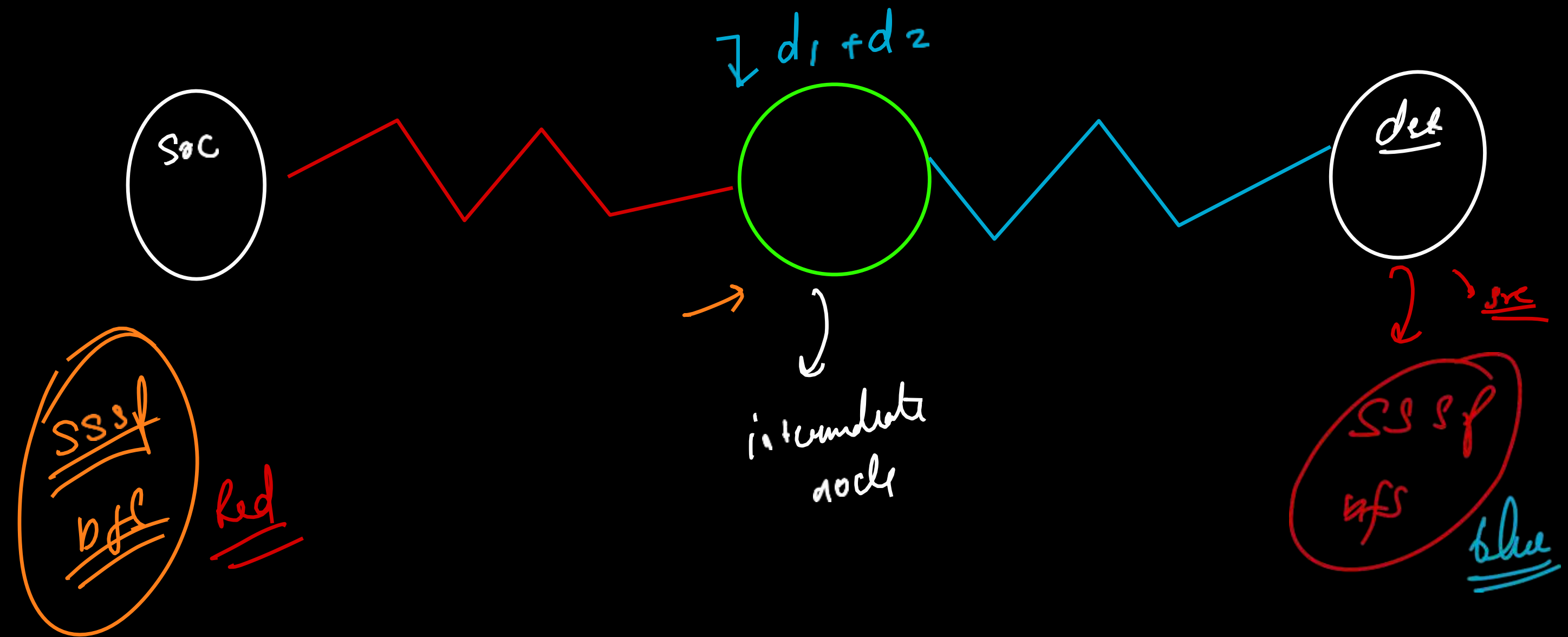
Q You're given an undirected unweighted graph, with a src & dest node. Every edge has a color either **red** or **blue**. find the shortest path btw src and dest such that

① The path always starts from a red edge & ends at a blue edge.

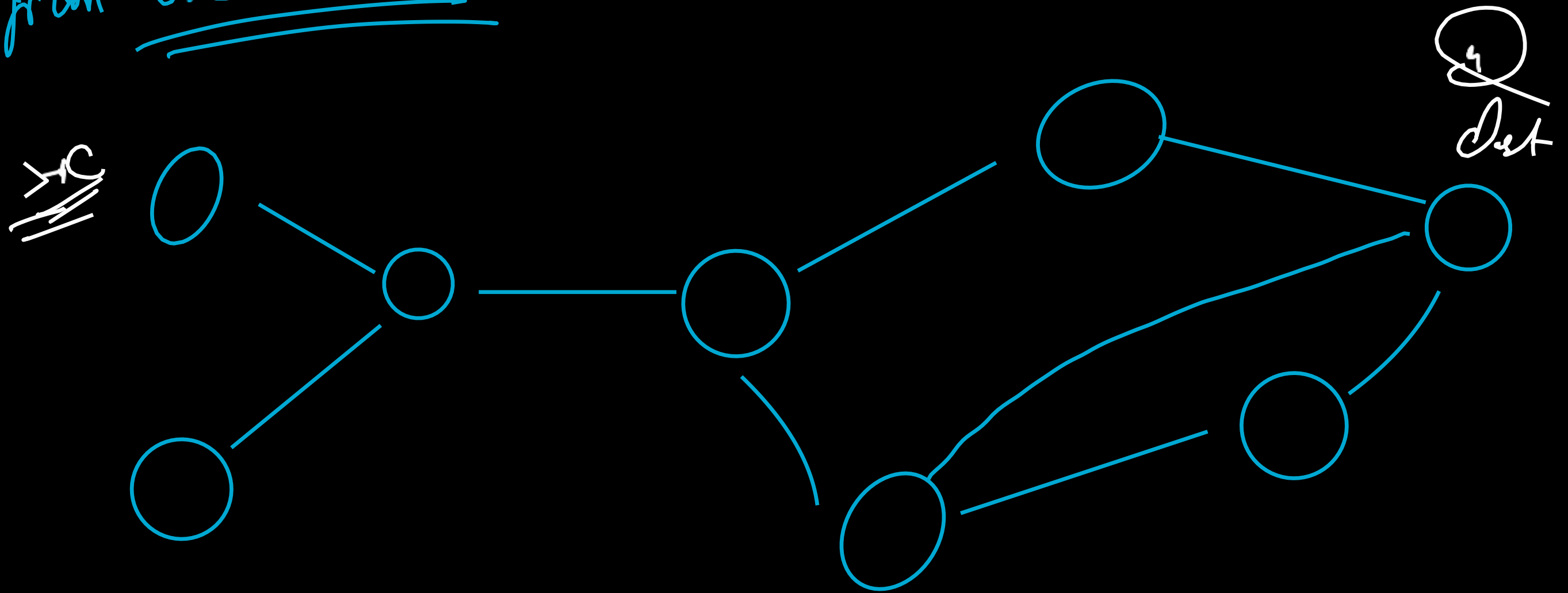
② You can shift from red edge to blue only once.

③ There are no self loops or multiple edges.



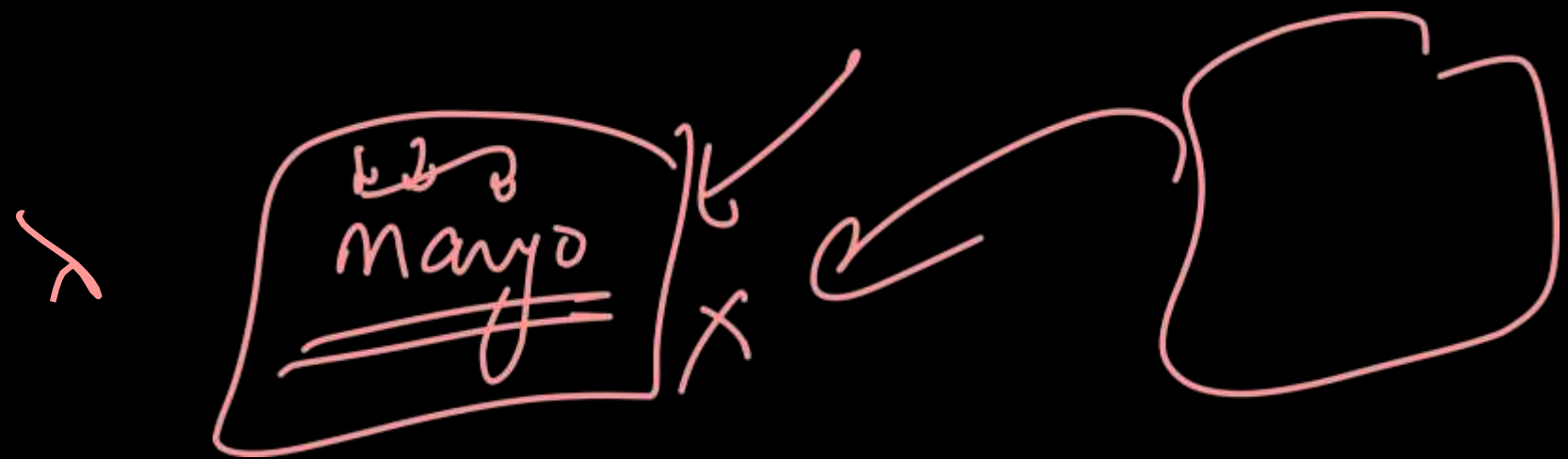


Qn Given an undirected, unweighted graph, a src & dest.
Find all nodes which come in atleast one shortest path
from src to dest.



↳ whenever we need to read a dictionary order
→ the letters within a word don't tell us much about the order.

→ [a d b c] , [d a b c]

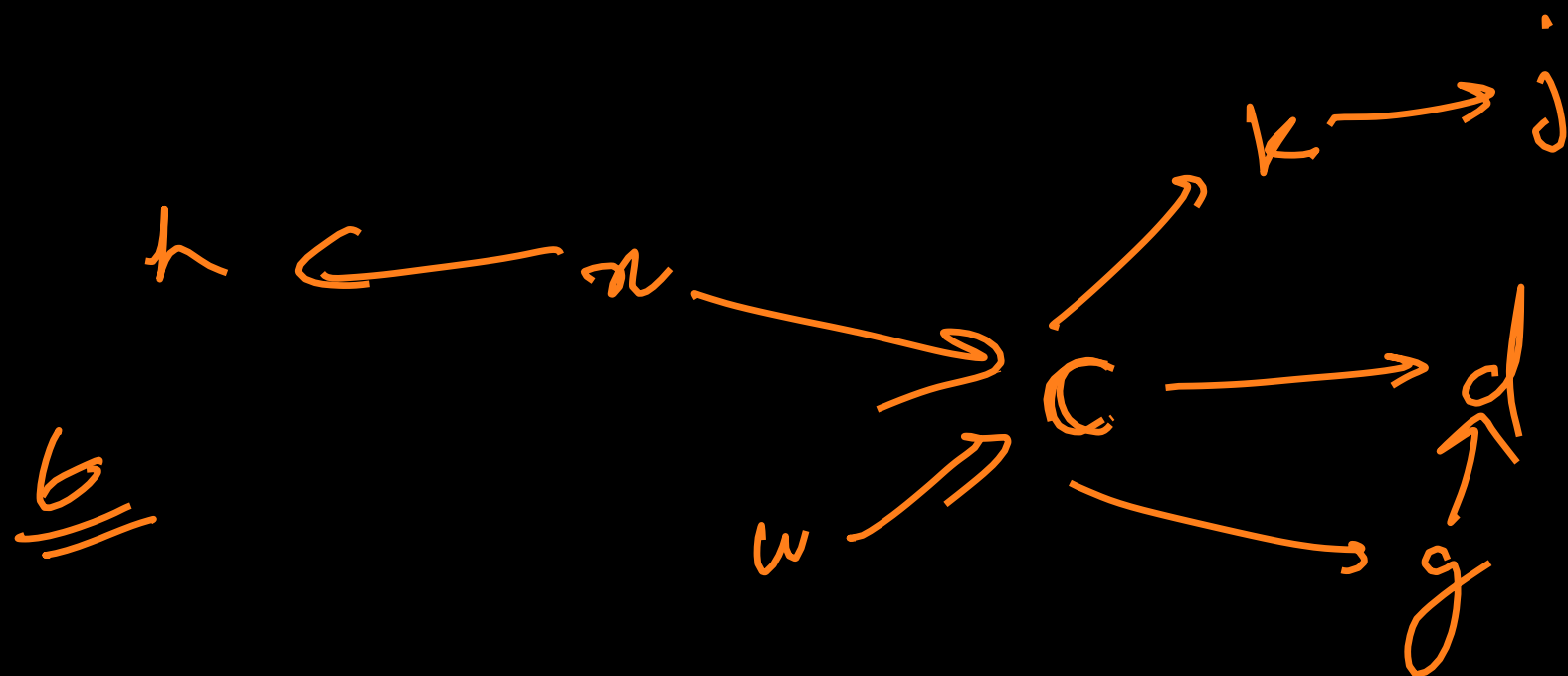


en \rightarrow [wxqkj, whqg, cckgh, cdxg, cdxdt, cdht, ktgxt, ktgch, ktaw, ktac, jgw, jmc, jmg]

$$\frac{w \rightarrow c}{\frac{c \rightarrow k}{k \rightarrow j}}$$

$$\frac{x \rightarrow h}{c \rightarrow d}$$

$$\frac{g \rightarrow d}{\frac{x \rightarrow h}{x \rightarrow c}}$$

$$\frac{q \rightarrow m}{c \rightarrow g}$$


loop

q \rightarrow m



▶ **THANK YOU** ◀