Lab section y 3 april

03 April 2025 08:22

Q1. There is a conference hall in an institute, multiple events has been requested to be held in the same hall on a day, the starting (si) and finishing (fi) time of the events have been given in the table:

s	1	3	0	5	3	5	6	8	8	2	12
f_i	4	5	6	7	9	9	10	11	12	14	16

Devise an algorithm to solve this problem and find out the events that can be organized.

(1) Activity selection problem ka Algo.

① finish time sort (↑).

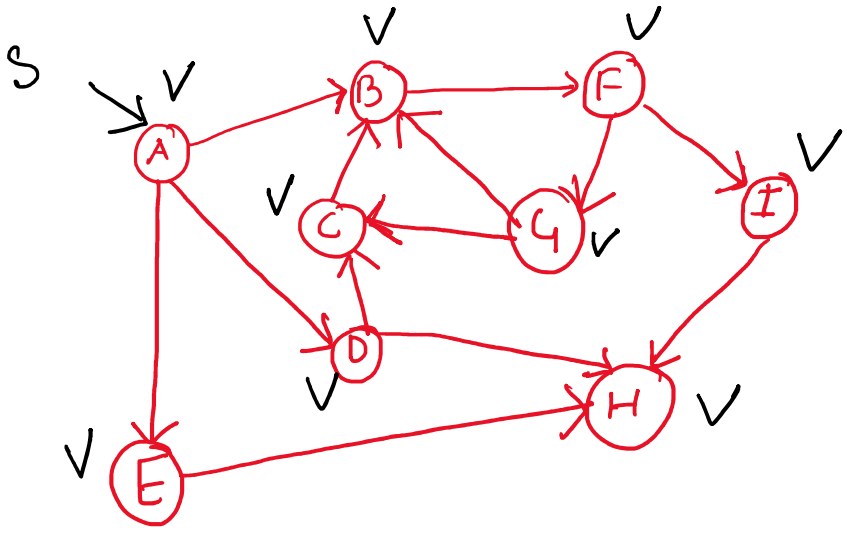
②

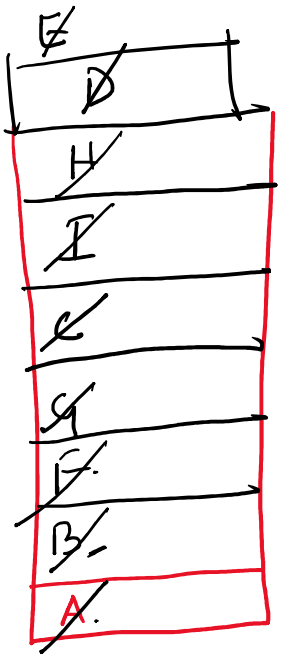
	T_0	T_1	T_2	T_3	T_4	T_5	T_6	T_7	T_8	T_9	T_{10}
s	1	3	0	5	3	5	6	8	8	2	12
f_i	4	5	6	7	9	9	10	11	12	14	16

Task to perform → T_0, T_3, T_7, T_{10}

Max Events = 4

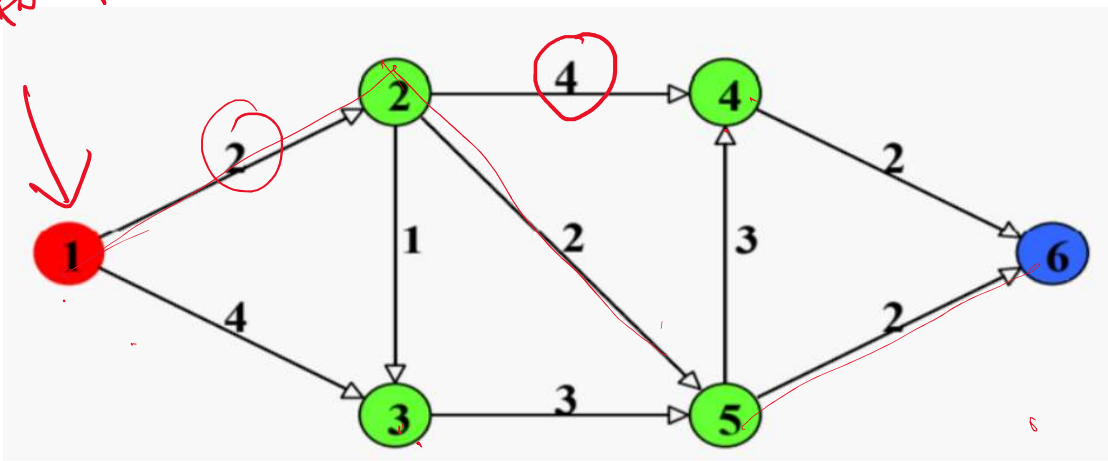
T_0.end time <= T_1.start tim





Print :- A B F G C I H D E

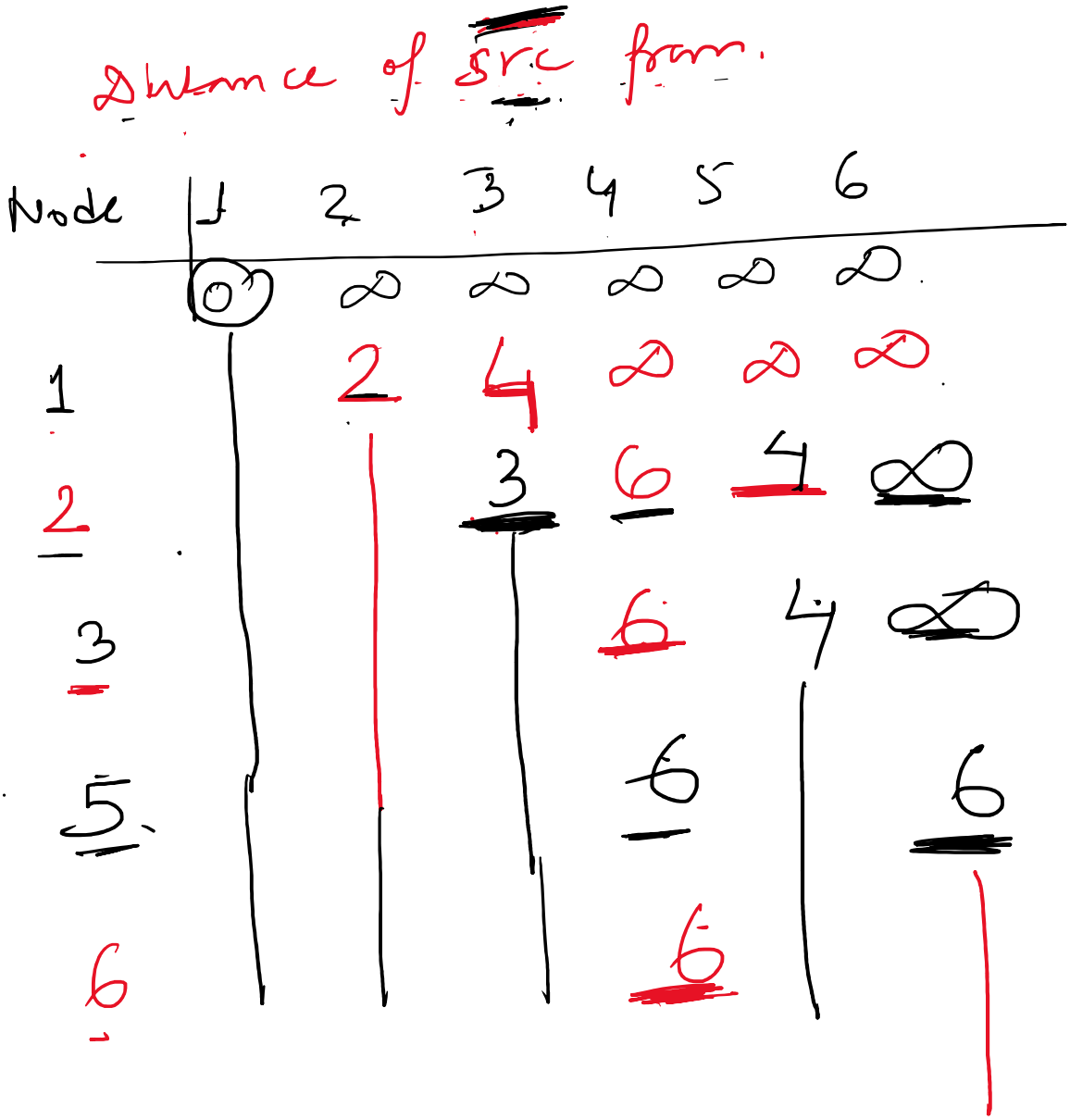
Start point.



D (src to 4) = D(src to 6) + D(6 to 4)

= 6 + 2

= ∞


Distance of src from.
Node
1 2 3 4 5 6
0 ∞ ∞ ∞ ∞ ∞
1 2 4 ∞ ∞ ∞
2 3 6 4 ∞
3 6 4 ∞
5 6 6
6 6