

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
fi	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.

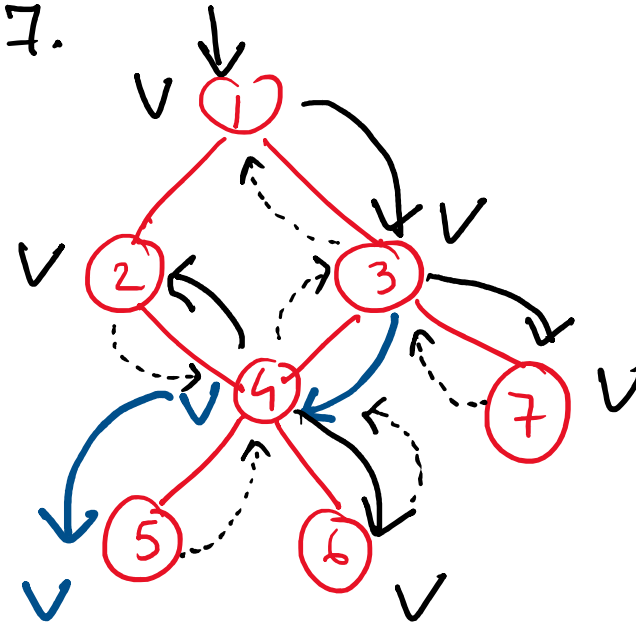
Algorithm:

1. Sort all activities based on their finish time.
2. Choosing the first activity from the sorted list.
3. Select the next activity from the sorted list only if its start time is greater than or equal to the finish time of the previously selected activity.
4. Repeat Step 3 for all the remaining activities in the sorted list.

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

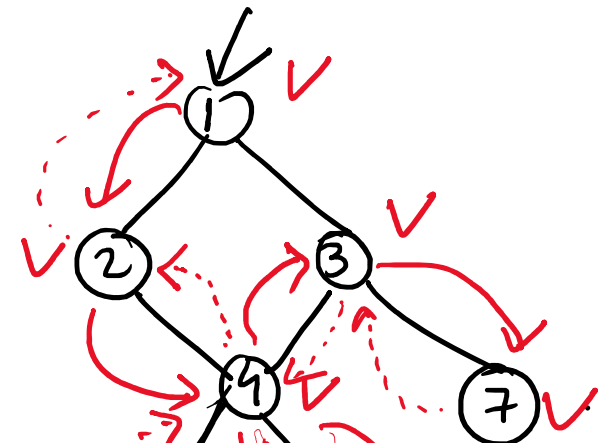
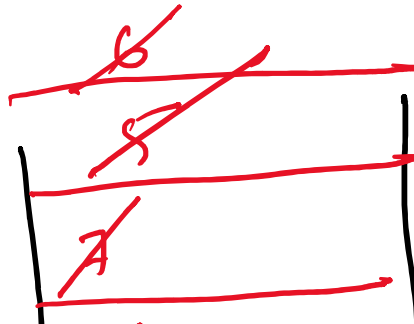
T_1, T_4, T_8, T_{11} → Max events to be organised = 4.

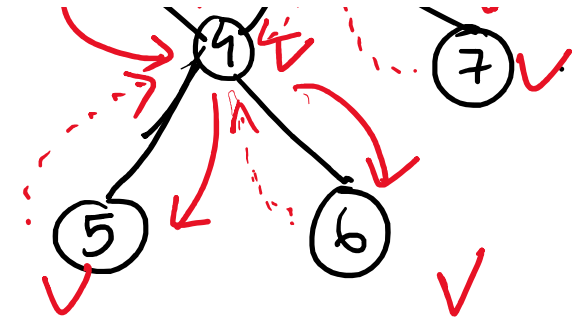
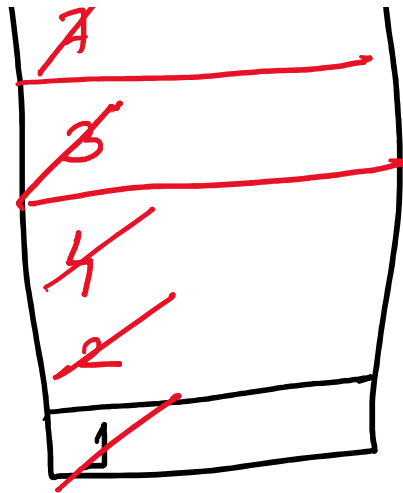
Print:- 1 3 4 5 2 6 7.



Print:- 1 2 4 3 7. 5 6

Stack:





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

