

N meetings in one room

There is **one** meeting room in a firm. There are **N** meetings in the form of (**start[i]**, **end[i]**) where **start[i]** is start time of meeting i and **end[i]** is finish time of meeting i. What is the **maximum** number of meetings that can be accommodated in the meeting room when only one meeting can be held in the meeting room at a particular time?

Note: Start time of one chosen meeting can't be equal to the end time of the other chosen meeting.

Example 1:

Input:

N = 6

start[] = {1, 3, 0, 5, 8, 5}

end[] = {2, 4, 6, 7, 9, 9}

Output:

4

Explanation:

Maximum four meetings can be held with given start and end timings.

The meetings are - (1, 2), (3, 4), (5, 7) and (8, 9)

Example 2:

Input:

N = 3

start[] = {10, 12, 20}

end[] = {20, 25, 30}

Output:

1

Explanation:

Only one meetings can be held with given start and end timings.

Your Task :

You don't need to read inputs or print anything. Complete the function **maxMeetings()** that takes two arrays **start[]** and **end[]** along with their size **N** as input parameters and returns the **maximum** number of meetings that can be held in the meeting room.

Expected Time Complexity : $O(N \cdot \log N)$

Expected Auxilliary Space : $O(N)$

Constraints:

$$1 \leq N \leq 10^5$$

$$0 \leq \text{start}[i] < \text{end}[i] \leq 10^5$$