Problem Statement **Suggest Edit**

Given two arrays, AT and DT, representing the arrival and departure times of all trains that reach a railway station, the task is to find the minimum number of platforms required for the railway station so that no train needs to wait.

Note :

Every train will depart on the same day and the departure time will always be greater than the arrival time. For example: A train with arrival time 2240 and departure time 1930 is not possible.

Follow Up :

Try to solve the problem in O(N) time and O(1) space.

Note :

You do not need to print anything, it has already been taken care of. You just need to return the minimum number of platforms required.

Time will be given in 24H format and colons will be omitted for convenience. For example, 9:05AM will be given as "905", or 9:10PM will be given as "2110".

Also, there will be no leading zeroes in the given times. For example, 12:10AM will be given as “10” and not as “0010”.

Input Format

The first line of input contains an integer 'T' representing the number of test cases. Then the test cases follow.

The first line of each test case contains an integer N, representing the total number of trains.

The second line contains N single-spaced separated elements of the array AT, representing the arrival times of all the trains.

The third line contains N single-spaced separated elements of the array DT, representing the departure times of all the trains.

Output Format:

For each test case, the minimum number of platforms required is printed.

The output for each test case is in a separate line.

Constraints:

```
1 <= T <= 10
1 <= N <= 50000
0 <= AT[i] <= DT[i] <= 2359

Where N is the number of trains and AT[i] and DT[i] are the elements of the
arrival and the departure arrays respectively.
```

Sample Input 1:

```
1
6
900 940 950 1100 1500 1800
910 1200 1120 1130 1900 2000
```

Sample Output 1:

```
3
```

Explanation Of The Sample Input 1:

```
For the given input, following will be the schedule of the trains :

Train 1 arrived at 900 on platform 1
Train 1 departed at 910 from platform 1
Train 2 arrived at 940 on platform 1
Train 3 arrived at 950 on platform 2     (since platform 1 was already occupied by
train 1)
Train 4 arrived at 1100 on platform 3    (since both platform 1 and 2 were
occupied by trains 2 and 3 respectively)
Train 3 departed at 1120 from platform 2 (platform 2 becomes vacant)
Train 4 departed at 1130 from platform 3 (platform 3 also becomes vacant)
Train 2 departed at 1200 from platform 1 (platform 1 also becomes vacant)
Train 5 arrived at 1500 on platform 1
Train 6 arrived at 1800 on platform 2
Train 5 departed at 1900 from platform 1
Train 6 departed at 2000 from platform 2

Thus, minimum 3 platforms are needed for the given input.
```

Sample Input 2:

```
1
2
900 940
910 1200
```

Sample Output 2:

```
1
```