

1450. Number of Students Doing Homework at a Given Time

Description

Given two integer arrays `startTime` and `endTime` and given an integer `queryTime`.

The `i`th student started doing their homework at the time `startTime[i]` and finished it at time `endTime[i]`.

Return *the number of students* doing their homework at time `queryTime`. More formally, return the number of students where `queryTime` lays in the interval `[startTime[i], endTime[i]]` inclusive.

Example 1:

Input: `startTime = [1,2,3], endTime = [3,2,7], queryTime = 4`

Output: 1

Explanation: We have 3 students where:

The first student started doing homework at time 1 and finished at time 3 and wasn't doing anything at time 4.

The second student started doing homework at time 2 and finished at time 2 and also wasn't doing anything at time 4.

The third student started doing homework at time 3 and finished at time 7 and was the only student doing homework at time 4.

Example 2:

Input: `startTime = [4], endTime = [4], queryTime = 4`

Output: 1

Explanation: The only student was doing their homework at the queryTime.

Constraints:

- `startTime.length == endTime.length`
- `1 <= startTime.length <= 100`
- `1 <= startTime[i] <= endTime[i] <= 1000`
- `1 <= queryTime <= 1000`

