https://course.acciojob.com/idle?question=71f9e64f-56ec-499b-95d0-da312adf139c

Range Check

You are given a 2D array `intervals` of size `n x 2`. Each `intervals[i]` = [`start`, `end`] represents an interval from `start` to `end` (both inclusive).

You are also given a range [`a`, `b`]. You need to find that all the integers in between `a` and `b`(both inclusive) are covered in atleast one of the interval of array `intervals`.

Return `true` is the condition is satisfied, else return `false`.

Input Format

First line contains an integer `n`, which is the number of intervals

Next `n` lines contains two space separated integers which represent the `start` and `end` of `ith` interval.

Last line contains two space separated integers which are `a` and `b`

Output Format

Complete the function `RangeCheck()` and return `true` or `false` according to the question

Example 1

Input

```
3
1 2
3 4
5 6
2 5
```

Output

```
true
```

Explanation

Every integer between 2 and 5 is covered:

- 2 is covered by the first range.
- 3 and 4 are covered by the second range.
- 5 is covered by the third range.

Example 2

Input

```
2
1 10
10 20
21 21
```

Output

```
false
```

Constraints

1 <= `n` <= 50

1 <= `intervals[i][0]` <= `intervals[i][1]` <= 50

1 <= `a` <= `b` <= 50

Topic Tags

- Hashing
- Prefix Sum
- Arrays

My code

```
// in java
import java.util.*;

class Solution {
    public boolean RangeCheck(int[][] intervals, int a, int b) {
        // Write your code here
                HashMap<Integer,Integer>hm=new HashMap<>();
int n=intervals.length;
                for(int i=0;i<n;i++)
                        {
                                for(int j=intervals[i][0];j<=intervals[i][1];j++)
                                        {
                                                hm.put(j,1);
                                        hm.put(j,1);
                                        }
                                // if(intervals[i][0] < a || intervals[i][0]>b)
                                // {
                                // if(intervals[i][1] < a || intervals[i][1]>b)
                                //      return false;

                        }
        for(int i=a;i<=b;i++)
        {
                if(!hm.containsKey(i))
                        return false;
        }
                return true;
    }
}
```

```
public class Main {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        int n =sc.nextInt();
        int[][] intervals = new int[n][2];
        for(int i = 0; i < n; i++) {
            intervals[i][0] = sc.nextInt();
            intervals[i][1] = sc.nextInt();
        }
        int a = sc.nextInt();
        int b = sc.nextInt();
            Solution Obj = new Solution();
        if(Obj.RangeCheck(intervals, a, b))
            System.out.println("true");
        else
            System.out.println("false");
    }
}
```