PROBLEMS   SUBMIT CODE   MY SUBMISSIONS   STATUS   STANDINGS   CUSTOM INVOCATION

J. M-islands

time limit per test: 2 seconds ❷
memory limit per test: 256 megabytes

There are m islands numbered from 1 to m, and n ships. Each ship has a group of islands numbered from L to R $(1 \le L \le R \le m)$ and can transport passengers between any two of them.

There are q persons, each of them wants to go from the island u to the island v. Your job is to find out if he can go or not

Input
The First line contains two numbers n, m $(1 \le m \le 10^9, 1 \le n \le 10^5)$

The next n lines contains L , R for the current ship $(1 \le L \le R \le m)$

The next line contains a number q $(1 \le q \le 10^5)$

The next q lines contains u, v for the current person $(1 \le u,v \le m)$

Output
Print q lines each of them contains "YES" if this person can go and "NO" otherwise.

Example

input	Copy
5 20	

```
5 20
1 2
2 3
5 9
7 10
15 20
9
1 2
1 3
2 3
1 4
5 4
5 10
6 9
16 19
5 16
```

output	Copy

```
YES
YES
YES
NO
NO
YES
YES
YES
NO
```