Connected Components
(connect.cpp/c)

Time Limit : 1 sec , Memory Limit : 131072 KB

Write a program which reads relations in a SNS (Social Network Service), and judges that given pairs of users are reachable each other through the network.

Input   (connect.in)

In the first line, two integer n and m are given. n is the number of users in the SNS and m is the number of relations in the SNS. The users in the SNS are identified by IDs $0, 1, \ldots, n-1$.

In the following m lines, the relations are given. Each relation is given by two integers s and t that represents s and t are friends (and reachable each other).

In the next line, the number of queries q is given. In the following q lines, q queries are given respectively. Each query consists of two integers s and t separated by a space character.

Output   (connect.out)

For each query, print "yes" if t is reachable from s through the social network, "no" otherwise.

Constraints

- $2 \le n \le 100,000$
- $0 \le m \le 100,000$
- $1 \le q \le 10,000$

Sample Input

```
10 9
0 1
0 2
3 4
5 7
5 6
6 7
6 8
7 8
8 9
3
```

```
0 1
5 9
1 3
```

Sample Output

```
yes
yes
no
```