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## Graphs (1)

P56483\_en

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Given an undirected graph with  $m$  vertices and  $m$  arcs, we wish to know if there is a directed path between two given vertices.

### Input

Input starts with  $n$  i  $m$ . Then follow  $m$  pairs  $u, v$ , with  $u \neq v$ , indicating an arc from  $u$  to  $v$ . We have that  $0 \leq u < n$  and  $0 \leq v < n$  and there are no repeated arcs. Then follows, a pair  $x, y$  with  $0 \leq x < n$  and  $0 \leq y < n$ .

### Output

Write "yes" o "no" according to whether there is or not a path from  $x$  to  $y$ .

#### Sample input 1

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

#### Sample output 1

```
yes
0 0 1
```

#### Sample input 2

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

#### Sample output 2

```
no
0 0 1
```

### Problem information

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