

Chef and Islands

Chef's Country is made up of **N** Islands, numbered from **1** to **N**. Some Islands are close enough so that they are connected by bridges. In total there are **M** bridges. Chef can go from an Island to any other Island which is directly or indirectly connected by bridges by taking the BUS service. To reach other Islands Chef has to take the **BOAT** service.

Since Chef is Busy playing **PUBG**, Chef needs your help to find out which mode of transport he has to use to go from Island **a** to Island **b**. You are given **Q** queries each query contain two integers denoting the number of start and end Island.

Input:

- First line will contain **N** and **M** number of Islands and number of bridges.
- Then **M** lines follow, each line contains two integers **u** and **v** denoting that Islands **u** and **v** are connected by bridges.
- Then the next line contains **Q** the number of queries.
- Then **Q** lines follow, each line contains two integers **a** and **b**

Output:

For each query, output mode of transport, print "**BUS**" or "**BOAT**" without quotes.

Constraints

- $1 \leq N, Q \leq 100000$
- $1 \leq M \leq N*(N-1)/2$
- No two bridges are same and there are no bridges from an Island to itself.

Sample Input:

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

Sample Output:

```
BUS
```