

SAC '22 Code Challenge 5 Junior P3 - Media List

Time limit: 1.0s **Memory limit:** 1G
Java: 2.0s

To seem more cultured, Max has undertaken consuming all the best media generated ever!

Currently, he has N different lists of media that he needs to fill up, but he cannot remember if he already added some media, so he will ask you Q queries of 2 types:

1 i $name$: Output 1 if the i^{th} media list already has $name$ in it and 0 otherwise.

2 i $name$: Insert $name$ into the i^{th} media list.

Can you help maintain Max's media list?

Constraints

$$1 \leq N, Q \leq 4 \times 10^5$$

$$1 \leq i \leq N$$

Each $name$ will be at most 5 lowercase letters.

Subtask 1 [40%]

$$N = 1$$

Subtask 2 [60%]

No additional constraints.

Note: Fast I/O might be required to fully solve this problem (e.g., `BufferedReader` for Java).

Input Specification

The first line will contain two integers, N and Q , the number of media lists and queries, respectively.

The next Q lines will contain one of the 2 types of queries listed above.

Output Specification

For each type 1 query, output 1 if that media list has $name$ in it and 0 otherwise.

Sample Input 1

```
1 6
1 1 test
2 1 test
2 1 test
1 1 test
2 1 blah
1 1 pf
```

Sample Output 1

```
0
1
0
```

Sample Input 2

```
2 6
1 1 test
2 1 test
2 1 test
1 2 test
2 2 blah
1 2 blah
```

Sample Output 2

```
0
0
1
```