

Election result

Election is contested by n candidates.

Candidates are numbered from 1 to n .

Voter can give vote to a candidate by his/her number.

Any number between 1 to n from voter is considered vote to particular candidate, and 0 from voter is considered NOTA (Non Of The Above).

Input Format

Input will contain $2 + m$ lines.

First line will have number of candidates (n)

Second line will have total no. of votes (m)

Next m lines will contain one vote per line

Constraints

$0 \leq \text{each vote} \leq n$

$0 < \text{no. of candidates } (n) \leq 1000$

$0 < \text{no. of votes } (m) \leq 1000000$

Output Format

Output should have 1 line containing

- winning candidate's number, in case of clear victory by any candidate
- 0, if NOTA wins.
- -1, if there is a tie.

Sample Input 0

```
10
5
7
0
10
9
10
```

Sample Output 0

```
10
```

Sample Input 1

```
1
1
1
```

Sample Output 1

```
1
```

Sample Input 2

```
1
1
0
```

Sample Output 2

```
0
```

Sample Input 3

```
1
2
1
0
```

Sample Output 3

```
-1
```

Sample Input 4

```
1
2
0
0
```

Sample Output 4

```
0
```

Sample Input 5

```
1
2
1
1
```

Sample Output 5

1

Sample Input 6

5
10
5
4
3
5
3
2
3
3
4
3

Sample Output 6

3

Sample Input 7

6
15
5
4
3
5
3
2
3
3
4
3
5
5
4
4
5

Sample Output 7

-1

Sample Input 8

6
15
0
4
3
0
2
0

3
3
4
3
0
0
4
4
0

Sample Output 8

0

Sample Input 9

3
5
3
3
1
2
0

Sample Output 9

3

Sample Input 10

3
10
1
3
3
2
2
3
1
1
3
2

Sample Output 10

3

Sample Input 11

100
5
0
0
1
100
100

Sample Output 11

-1