

Sample test prob IOI 2010:

Sample Input 1

```
5 5 3 3
5 11 12 16 25
17 18 2 7 10
4 23 20 3 1
24 21 19 14 9
6 22 8 13 15
```

Sample Output 1

```
9
```

Sample test prob C

Sample Input

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

Sample Output

```
no
yes 1
no
yes 1
no
yes 2
no
yes 3
```