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## 2. Blob Top

**Program Name:** BlobTop.java

**Input File:** blobtop.dat

James is studying different shapes in a plane. For this particular study, he refers to the shapes as “blobs” because they are irregularly shaped solid polygons. He represents his blobs in a rectangular grid as a collection of one or more contiguous asterisks (\*). Contiguous means that the asterisks must be adjacent either horizontally or vertically. Characters in the grid that are not part of a blob are represented by periods (.). In the diagram below, there are 4 blobs.

```

    . . . . * . .
    * * * . . . .
    * * * . . . .
    * * * . . . .
    * * * . . . .
    . . . . * * .
    . . . . * * .
    * * * . . . .
    . . . .
```

You are to write a program that, will determine the location of the uppermost, leftmost character of a blob given the coordinates of a given character in the grid. The uppermost, leftmost character of the largest blob in the example above is row 2, column 1 or 2 1.

### Input

The first line of input will contain a single integer  $n$  that indicates the number of data sets to follow. For each data set:

- the first line will contain three integers in the form  $r \ c \ s$  which meet the following criteria:
  - $r \geq 3$  is the number of rows in the grid
  - $c \geq 3$  is the number of columns in the grid
  - $s > 1$  is the number of test cases for that grid
- the next  $r$  lines will contain the grid.
- the next  $s$  lines will each contain an ordered pair  $x \ y$ ,  $1 \leq x \leq r$  and  $1 \leq y \leq c$ , which is the location of a character in the grid.

### Output

For each test case, you will print the coordinates of the upper, leftmost character of the blob in the form  $j \ k$  where  $1 \leq j \leq r$  and  $1 \leq k \leq c$ . If the test case falls on a square that is not part of a blob, print NOT A BLOB,

### Example Input File

```

2
7 8 2
. . . . * . .
* * * . . . .
. * * * . . . .
* * * * . . . .
. . . . * * .
. . * * . . . .
. . * * . . . .
. . * * . . . .
4 1
5 3
4 8 3
. . . . . * *
* * * . * * *
. . . . . * *
* * * . * * *
2 3
4 5
2 8
```

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## 2. Blob Top (cont.)

### Example Output to Screen

```
2 1
NOT A BLOB
2 1
1 7
1 7
```