
1. Blob Count

Program Name: BlobCount.java

Input File: blobcount.dat

Johnny is studying different shapes in a plane. For this particular study, he refers to the shapes as blobs even though they are solid rectangles. 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. Non-blob characters are represented by periods (.). In the diagram below, there are 4 blobs.

```

      . . . . * . .
      * * * * . . .
      * * * * . . .
      * * * * . . .
      . . . . * * .
      . * * * . . .
      . * * * . . .

```

Johnny knows the location of the uppermost, leftmost corner of a blob. You are to write a program that will determine the number of characters in the blob. The largest blob in the example above has its uppermost, leftmost corner at 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 that is either the uppermost, leftmost character in a blob or not in a blob at all.

Output

For each test case, you will print the number of characters in the blob. If the test case falls on a cell that is not part of a blob, print NO BLOB.

Example Input File

```

2
7 8 2
. . . . * . .
* * * * . . .
* * * * . . .
* * * * . . .
. . . . * * .
. * * * . . .
. * * * . . .
2 1
5 3
5 6 3
. . . * * *
* * * . . .
. . . * * *
* * . * * *
* * . * * *
3 4
4 1
1 4

```

1. Blob Count (cont.)

Example Output to Screen

```
12
NO BLOB
9
4
3
```