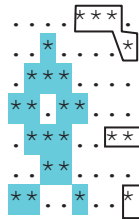

2. Blob Size

Program Name: BlobSize.java

Input File: blobsize.dat

Jeffery is studying different shapes in a plane. For this particular study, he refers to the shapes as “blobs” because they are irregularly shaped polygons that remind him of blobs even though some of the blobs have centers that are not part of the blob. 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, vertically or diagonally. Characters in the grid that are not part of a blob are represented by periods (.). In the diagram below, there are 4 blobs – three shown with boxes and one shown grayed.



You are to write a program that will determine the number of cells in the blob given the coordinates of a particular character in the grid. The uppermost, leftmost character of the example above is in row 1, column 1 or 1 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 number of cells in the blob that contains the cell at the given location. If the test case falls on a square that is not part of a blob, print NO BLOB.

Example Input File

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

2. Blob Size (cont.)

Example Output to Screen

```
16
NO BLOB
3
10
10
```