Problem

You are given a table with n rows and m columns. Each cell is colored with white or black. Considering the shapes created by black cells, what is the maximum border of these shapes? Border of a shape means the maximum number of consecutive black cells in any row or column without any white cell in between.

A shape is a set of connected cells. Two cells are connected if they share an edge. Note that no shape has a hole in it.

Input format

- The first line contains t denoting the number of test cases.
- The first line of each test case contains integers n, m denoting the number of rows and columns of the matrix. Here, '#' represents a black cell and '.' represents a white cell.
- Each of the next n lines contains m integers.

Output format

Print the maximum border of the shapes.

Sample Input	Sample Output
10 2 15 .....####..... .....#..... 7 9 ...###... ...###... ..#..... .####.... ..#..... ...#####. ..... 18 11 .#########. ########... .....#. ####..... .....#####. .....##.... ....#####.. .....####.. ..###..... .....#.... ....#####.. ...####.... ##..... #####..... ....#####.. ....##..... .#######... .#..... 1 15 .....######.... 5 11 ..#####.... .#######... .....#.... ....#####.. ...#####... 8 13	4 5 9 6 7 8 3 1 14 5

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...#.........
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#######......
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####.........
7 5
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.#...
14 2
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7 15
.###########...
###############.
...####........
...##########..
.......#.......
.....#########.
.#######.......
12 6
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#.....
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..##..
...#..
..#...
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Time Limit: 1

Memory Limit: 256

Source Limit: