



Note: While it doesn't affect the correctness of your algorithm in general, for the marker it is important to visit neighbours of the current cell in the correct order: down, left, up, right.

6.5.5 Sample Input/Output

You will receive the following input format on stdin:

1. The first line will contain 2 integers, `m` and `n`, separated by a space. These numbers represent the number of rows and columns in the grid respectively.
2. There will then be `m` lines each with `n` columns that represent the maze.
 - A `space` represents an open block in the world. You may travel through this block.
 - An `x` represents an obstacle. You may not travel through this block.
 - An `s` represents the start.
 - A `g` represents the goal.
3. The output should be the maze with `*` characters along the shortest path from the start to the goal.
 - 1 If there is no path between the start and goal, then the output should say `No Path`.

maze1.txt

14 17

xxxxxxxxxxxxxxxxxxx

x

maze2.txt

14 17

xxxxxxxxxxxxxxxxxxx

x

x

x

x

maze3.txt

14 17

xxxxxxxxxxxxxxxxxxx

x

x

x