Problem B. Counting Rooms

Time Limit   1000 ms

Mem Limit   524288 kB

You are given a map of a building, and your task is to count the number of its rooms. The size of the map is $n \times m$ squares, and each square is either floor or wall. You can walk left, right, up, and down through the floor squares.

Input

The first input line has two integers n and m: the height and width of the map.

Then there are n lines of m characters describing the map. Each character is either `.` (floor) or `#` (wall).

Output

Print one integer: the number of rooms.

Constraints

- $1 \le n, m \le 1000$

Example

Input	Output
5 8 ######## #..#...# ####.#.# #..#...# ########	3