Maze

Problem description

In a maze there is a unique shortest way to get from the top left to the top right spot.
Find this way and mark it with breadcrumps.

Input

An odd number $3 \leq n \leq 101$ followed by n lines of n characters each encoding a maze.
A hash sign denotes a wall and a space free space.

Output

n lines of n characters each encoding the same maze. The shortest path must be marked
with '.' characters.

Sample input/output

Input	Output
<pre>11 ########### # # # ##### ##### # # # # # # ### # ### # # # # ###########</pre>	<pre>########### #.....#...# #####.#.# # #...#.#.# # #.#.#.#.# # #.#...#.# # #.#####.# # #...#...# # ###.#.### # # ...# # ###########</pre>