□ Discuss (424)

Submissions

909. Snakes and Ladders

Description

△ Solution

You are given an $n \times n$ integer matrix board where the cells are labeled from 1 to n^2 in a **Boustrophedon style** starting from the bottom left of the board (i.e. board[n - 1][0]) and alternating direction each row.

You start on square 1 of the board. In each move, starting from square curr, do the following:

- Choose a destination square next with a label in the range [curr + 1, min(curr + 6, n²)].
 - This choice simulates the result of a standard 6-sided die roll: i.e., there are always at most 6 destinations, regardless of the size of the board.
- If next has a snake or ladder, you **must** move to the destination of that snake or ladder. Otherwise, you move to next.
- The game ends when you reach the square n^2 .

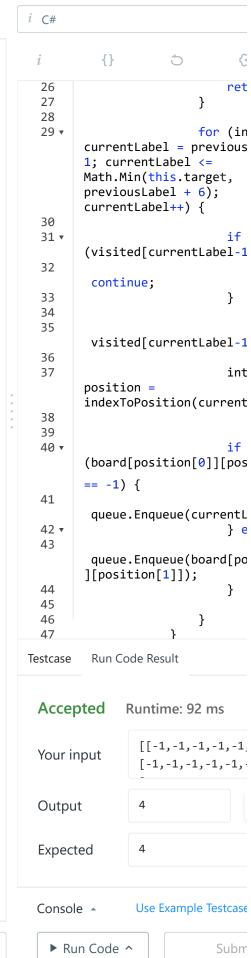
A board square on row $\, r \,$ and column $\, c \,$ has a snake or ladder if $\, board[r][c] \, ! = -1 \,$. The destination of that snake or ladder is $\, board[r][c] \,$. Squares $\, 1 \,$ and $\, n^2 \,$ do not have a snake or ladder.

Note that you only take a snake or ladder at most once per move. If the destination to a snake or ladder is the start of another snake or ladder, you do **not** follow the subsequent snake or ladder.

• For example, suppose the board is [[-1,4],[-1,3]], and on the first move, your destination square is 2. You follow the ladder to square 3, but do **not** follow the subsequent ladder to 4.

Return the least number of moves required to reach the square n^2 . If it is not possible to reach the square, return -1.

Example 1:



15/30