**We find and solve the subproblem.**

**For the sake of considering only general cases later, we first consider squares in the first row and column. Since there is only one way to reach them.** We need to manually find out optimal solutions to reach them, which are , ,……, and , , ……, . Calculating them is straightforward, because for , , ……, , they do not have square above them. The only way to access them is from the square on their left. Similarly, for , , ……, , they do not have squares on the left. The only way to access them is from the square above them.

**Now we consider general cases.** According to the question, to reach the grid , the last step should be either from to or from to . If the last step is from to , and , which means we move from lower elevation to higher elevation, the optimal solution is the optimal solution from to plus one. Otherwise, the optimal solution is optimal solution from to . Similarly, If the last step is from to , and , which means we move from lower elevation to higher elevation, the optimal solution is the optimal solution from to plus one. Otherwise, the optimal solution is optimal solution from to .

**We aim to solve the following subproblem: What is the optimal path from to so that the number of moves from lower elevation to higher elevation along such a path is as small as possible? The recursion is:**

**The final solution is .**