

In the mystical realm of Ardenia, lies a labyrinthine forest adorned with enchanted stones, each possessing unique magical properties. Within this forest, a courageous explorer named Aria embarks on a quest to navigate through the maze, starting from starting from the top-left corner and aiming to reach the bottom-right corner. However, some stones in the maze are cursed, making them impassable. Aria can only move right or down at any intersection within the maze.

Your task is to aid Aria in determining the number of unique paths she can take to reach her destination while gracefully avoiding the cursed stones.

Input Format

- The first line contains two integers **m** and **n** separated by a space, indicating the dimensions of the enchanted grid
- The second line contains an integer **c**, representing the number of cursed stones in the maze.
- The following c lines each contain two integers x_i and y_i separated by a space ($0 \leq x_i$

Constraints

- $1 \leq m, n \leq 100$
- $0 \leq c \leq m \times n$
- $0 \leq x_i < m, 0 \leq y_i < n$ for each cursed stone
- The answer will be less than or equal to 2×10^9 .

Output Format

- A single integer representing the number of unique paths Aria can take from the starting point to the ending point while avoiding the cursed stones.

Sample Input 0

```
4 4
2
1 1
2 2
```

Sample Output 0

```
4
```

Explanation 0

In this testcase, the enchanted grid is 4x4. There are two cursed stones at coordinates (1,1) and (2,2). Aria can take the following unique paths to reach the destination: - (0,0) -> (0,1) -> (0,2) -> (0,3) -> (1,3) -> (2,3) -> (3,3) - (0,0) -> (1,0) -> (2,0) -> (3,0) -> (3,1) -> (3,2) -> (3,3) - (0,0) -> (0,1) ->

(0,2) -> (1,2) -> (1,3) -> (2,3) -> (3,3) - (0,0) -> (1,0) -> (2,0) -> (2,1) -> (3,1) -> (3,2) -> (3,3)

Sample Input 1

```
2 2
0
```

Sample Output 1

```
2
```

Explanation 1

In this testcase, the enchanted grid is 2×2 , and there are no cursed stones. Aria can take the following unique paths to reach the destination: - (0,0) -> (0,1) -> (1,1) - (0,0) -> (1,0) -> (1,1)

Sample Input 2

```
3 3
1
1 1
```

Sample Output 2

```
2
```

Explanation 2

In this test case, the enchanted grid is 3×3 . There is one cursed stone at coordinate (1,1) Aria can only take the following unique paths to reach the destination: - (0,0) -> (1,0) -> (2,0) -> (2,1) -> (2,2) - (0,0) -> (0,1) -> (0,2) -> (1,2) -> (2,2)