

### **THE ICPC 2018**

### VIETNAM SOUTHERN PROGRAMMING CONTEST Host: University of Science, VNU-HCM

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# Problem A Alice in NumberMaze Time Limit: 1 second

Alice is in a NumberMaze. Please help her to solve the quest so that she can return home.

A NumberMaze is a grid of size  $n \times m$  with n + m even. The rows are numbered from 1 to n from top to bottom, and the columns are numbered from 1 to m from left to right. A cell on row i and column j is called cell (i,j). All cells (i,j) with i+j even are colored in black while the rest are in white. Each black cell contains an integer from 0 to 9. Each white cell contains a plus '+' (arithmetic addition) or an asterisk '\*' (arithmetic multiplication).



Alice must to go from cell (1,1) to cell (n,m) by moving one step at a time to an adjacent cell that is to the right or to the bottom of the current cell. Two cells are adjacent if they share exactly one edge. While moving, we also write down the number or the operation in every cell along the path, including the first cell (1,1) and last cell (n,m), to form an expression including only additions and multiplications of integers.

Your task is to help Alice find a path from cell (1,1) to cell (n,m) that yields an expression with the largest value.

## Input

The first line contains two integers  $n, m \ (1 \le n, m \le 50)$ .

The *i*-th line in the next *n* lines contains a string of length *m* describing the *i*-th row of the grid.

# **Output**

Print the value of the result expression after calculated.

# **Sample Input**

# **Sample Output**

3 3	41
1+3	
+8*	
3 3 1+3 +8* 3*5	