Problem E. Mountains

Input file:	*standard input*
Output file:	*standard output*
Time limit:	1 second
Memory limit:	256 mebibytes

Damir is climbing mountains. The mountain map can be represented as an $n \times m$ grid, in which a cell at the intersection of row i and column j is denoted as (i, j). The height of the peak in cell (i, j) is equal to a non-negative integer $a_{i,j}$. Damir starts his journey on the peak in cell $(1, 1)$ aiming to reach the peak in cell (n, m). If Damir is in on the peak in cell (i, j), then he can go either to the peak in cell $(i + 1, j)$ or to the peak in cell $(i, j + 1)$. Of course, he cannot go outside the boundaries of the map. To make the journey more interesting, he chooses the path with the *largest sum of peak heights* (kind of total climb).

Damir loves combinatorics, and he became curious: how many $n \times m$ maps are there such that the sum of peak heights on his path does not exceed k? As the answer may be large, find it modulo $10^9 + 7$.

Input

The only line of input contains three integers, n, m, and k ($1 \le n, m, k \le 100$).

Output

Print the answer modulo $10^9 + 7$.

Examples

standard input	standard output
1 1 1	2
2 2 2	20
2 3 4	490