

Another Box Problem

There are N numbered boxes placed on a table, let B_i denote the i th box in the line. Write a program that finds the total number of ways to place N identical balls such that at most k balls are present in the boxes B_1, \dots, B_k for $1 \leq k \leq N$. Since the number can be quite large you are supposed to output the answer modulo 761238923.

Input

Input will contain multiple testcases, on each line N ($1 \leq N \leq 100$) will be given. The last line contains 0 which should not be processed.

Output

For each testcase output exactly one line, the total number possible of ways modulo 761238923.

Example

Input:

1
2
0

Output:

1
2