Distributing the balls

In this task you have compute the number of ways we can distribute **A** balls into **B** cells with with every cell having at-least one ball.

Input

The inputs A and B are given in a single line separated by a blank, the inputs are terminated by EOF.

Output

Output the answer modulus 247383691.

Score

Score is the length of your code.

Example

Input:

12 4

63

Output:

14676024 540

Constraints

- Every A and B can be distinguishable.
- [math]0 \le A \le 1000000 [\math]
- [math]0 \le B \le 100 [\math]