How Many Trees?

You are given two integers N and L. Compute the number of unrooted labelled trees with exactly N nodes and exactly L leafs. This number can be huge, so please output it's modulo $10^9 + 7$.

Input Format

The first line of input consists of two space separated integers N and L.

Constraints

$$1 \le L < N \le 10^6$$

Output Format

Display an answer to the problem on first line of the output.

Sample Input

5 2

Sample Output

60