Twitter: @RedProgramacion



Problem F. Factorial Divisors

Source file name: factorial.c, factorial.cpp, factorial.java

Input: Standard Output: Standard

Author(s): Gilberto Vargas Hernández

The factorial of N is defined as the product of all the numbers between 1 an N and is denoted by the ! symbol. For example, 10! = 10 * 9 * 8 * 7 * 6 * 5 * 4 * 3 * 2 * 1 = 3628800. There is a list of numbers that can divide 10!, those are called divisors. For example, the divisors of 4! are 1, 2, 3, 4, 6, 8, 12 and 24 itself.

There are many ways to count the number of divisors of a number, but since we are talking about factorials you must think one excellent way to do so.

Your task consists in counting how many numbers are that divide N! but not divide K! $(1 \le K \le N \le 10^6)$.

Input

The input consists of several test cases, each one with two numbers N and K separated by one space. The input ends at the end of file (EOF).

•
$$1 \le K \le N \le 10^6$$

Output

For each case you must print a single line with a single number, the result modulo 987654321.

Example

Input	Output
4 2	6

Explication

4! = 4 * 3 * 2 * 1 = 24, 2! = 2 * 1 = 2 Divisors of 4! = 24 are : $\{1, 2, 3, 4, 6, 8, 12, 24\}$ as stated above. Divisors of 2! = 2 are : $\{1, 2\}$, then the only 6 divisors of 4! that don't divide 2! are : $\{3, 4, 6, 8, 12, 24\}$