

Modular Multiplicative Inverse

Problem Description

Solve the [Modular Multiplicative Inverse](#) problem.

Input Specification

Line 1: N, M ($0 \leq N < M \leq 10^{19}$, N is coprime to M)

Note: The values will not fit in a 32 bit integer. They will fit in a 64 bit unsigned integer. For languages that do not have unsigned datatypes, please use a general big integer.

Output Specification

Line 1: The modular multiplicative inverse of N modulo M . The value should be nonnegative.

Sample Input

```
2 7
```

Sample Output

```
4
```