DMPG '18 B2 - Mimi and Modulus

Time limit: 1.0s   **Memory limit:** 64M

The modulo operator is a very commonly used operation in computer science. The result of taking A modulo B is equal to the remainder of A when divided by B.

For her ICS homework, Mimi was asked to find the greatest result of $A \bmod M$ for all integers A in the range $1, 2, \ldots, N$. Can you help Mimi do her homework?

Constraints

Subtask 1 [40%]

$1 \leq N, M \leq 10^5$

Subtask 2 [60%]

$1 \leq N, M \leq 10^9$

Input Specification

The first and only line of input will contain two space separated integers, N and M.

Output Specification

The greatest result of $A \bmod M$ for all integers A in the range $1, 2, \ldots, N$.

Sample Input

```
5 3
```

Sample Output

```
2
```