

# Good Sets

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**Time limit:** 1.0s    **Memory limit:** 512M

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A set is called a good set if every element is a positive integer not exceeding  $N$ , and any two distinct elements of the set have an absolute difference of at least  $M$ .

Find the number of good sets modulo  $10^9 + 7$ .

## Constraints

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$$1 \leq M \leq N \leq 10^6$$

### Subtask 1 [10%]

$$1 \leq N \leq 10$$

### Subtask 2 [30%]

$$1 \leq N \leq 10^4$$

### Subtask 3 [60%]

No additional constraints.

## Input Specification

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The only line contains two space-separated integers,  $N$  and  $M$ .

## Output Specification

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Output the number of good sets modulo  $10^9 + 7$ .

## Sample Input

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```
4 3
```

## Sample Output

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```
6
```

## Explanation for Sample

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The good sets are  $\{\}$ ,  $\{1\}$ ,  $\{2\}$ ,  $\{3\}$ ,  $\{4\}$ ,  $\{1, 4\}$ .