Project Euler #48: Self powers

Problem Statement

This problem is a programming version of Problem 48 from projecteuler.net

The series,

$$1^1 + 2^2 + 3^3 + \cdots + 10^{10} = 10405071317$$

Find the last ten digits of the series,

$$1^1 + 2^2 + 3^3 + \cdots + N^N$$

Note You do not need to print leading zeros. See sample.

Input Format

Input contains an integer N

Output Format

Print the answer corresponding to the test case.

Constraints

$1 \leq N \leq 2 \times 10^6$

Sample Input

```
10
```

Sample Output

```
405071317
```