Project Euler #48: Self powers

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

Sample Input

```
10
```

Sample Output

```
405071317
```