

Project Euler #63: Powerful digit counts



This problem is a programming version of [Problem 63](#) from [projecteuler.net](#)

The **5** – *digit* number, $16807 = 7^5$, is also a fifth power. Similarly, the 9-digit number, $134217728 = 8^9$, is a ninth power.

Given N , print the N – *digit* positive integers which are also an N^{th} power?

Input Format

Input contains an integer N

Constraints

$$1 \leq N \leq 19$$

Output Format

Print the answer corresponding to the test case.

Sample Input

2

Sample Output

16
25
36
49
64
81