

# 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