Problem D. Digits

Input file:	digits.in
Output file:	digits.out
Time limit:	2 seconds
Memory limit:	256 megabytes

Little Petya likes integers. Recently he has learned about different properties of sums of number's digits. For example, if the sum of number's digits is divisible by 9, then the number itself is divisible by 9 as well.

Now little Petya is interested in numbers with equal sum of digits. He asks his older brother Dima to find n positive integers with equal sum of digits and minimal possible total sum. Dima has other important things to do, so he asked you to write a program that solves this problem for him.

Input

Input file contains a single integer n ($1 \le n \le 5000$).

Output

Output the minimal possible sum of n positive integers, that all have same sum of digits.

Examples

digits.in	digits.out
2	11
3	33