Project Euler #20: Factorial digit sum

This problem is a programming version of Problem 20 from projecteuler.net

$$n! \text{ means } n \times (n - 1) \times \cdots \times 3 \times 2 \times 1$$

For example, $10! = 10 \times 9 \times \cdots \times 3 \times 2 \times 1 = 3628800$, and the sum of the digits in the number $10!$ is $3 + 6 + 2 + 8 + 8 + 0 + 0 = 27$.

Find the sum of the digits in the number $N!$

Input Format
The first line contains an integer T , i.e., number of test cases.
Next T lines will contain an integer N.

Output Format
Print the values corresponding to each test case.

Constraints
$1 \le T \le 100$
$0 \le N \le 1000$

Sample Input

```
2
3
6
```

Sample Output

```
6
9
```