

# Factorial digit sum

**Problem 20** (<http://projecteuler.net/problem=20>)

$n!$  means  $n \times (n - 1) \times \dots \times 3 \times 2 \times 1$

For example,  $10! = 10 \times 9 \times \dots \times 3 \times 2 \times 1 = 3628800$ , 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  $100!$

## Solution

```
In [1]:  from math import factorial
         sum(map(int, str(factorial(100))))
```

```
Out[1]: 648
```