Project_Euler_020

February 4, 2018

1 Project Euler Problem 20

n! means n Œ (n 1) Œ ... Œ 3 Œ 2 Œ 1

For example, 10! = 10 Œ 9 Œ ... Œ 3 Œ 2 Œ 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!

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In [2]: from functools import reduce

        def factorial(n):
            return reduce(lambda x, y: x*y, list(range(1, n+1)))

        print("The sum of the digits in 100! is {}."
              .format(sum(list(map(int, list(str(factorial(100)))))))
```

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The sum of the digits in 100! is 648.
```