

# Project\_Euler\_016

February 4, 2018

## 1 Project Euler Problem 16

$2^{15} = 32768$  and the sum of its digits is  $3 + 2 + 7 + 6 + 8 = 26$ .

What is the sum of the digits of the number  $2^{1000}$ ?

```
In [2]: # Very simple: take 2^1000, turn it into a string, then
        # turn that string into a list. You have a list of numbers
        # as characters. Map int() to the elements of that list, so
        # you now have a list of digits as integers. Finally,
        # sum the list of digits.

        print("The sum of the digits of 2^1000 is {}".format(sum(list(map(int, list(str(2**1000)))))))
```

The sum of the digits of  $2^{1000}$  is 1366.