

6-Problem_16

November 12, 2020

1 Power digit sum

1.1 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} ?

```
[58]: num = 2**1000
      num
```

```
[58]: 10715086071862673209484250490600018105614048117055336074437503883703510511249361
      22493198378815695858127594672917553146825187145285692314043598457757469857480393
      45677748242309854210746050623711418779541821530464749835819412673987675591655439
      46077062914571196477686542167660429831652624386837205668069376
```

```
[59]: num = str(num)
```

```
[60]: suma=0
      for i in num:
          suma+= int(i)
```

```
[62]: print("La suma de los dígitos de 2^1000 es:",suma)
```

La suma de los dígitos de 2^{1000} es: 1366