

Euler's project problem 1

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This document serves as a template of your solution of the bonus problem.

Problem statement

If we list all the natural numbers below 10 that are multiples of 3 or 5, we get 3, 5, 6 and 9. The sum of these multiples is 23.

Find the sum of all the multiples of 3 or 5 below 1000.

Answer

The sum is 233168.

Idea

I checked all the numbers below 1000 and took the sum.

Matlab code

```
def isPrime(num):
    for i in range(2, num // 2 + 1, 1):
        if num % i == 0:
            return(False)
    return(True)

def lrgstPrimeFac(num):
    for i in range(num, 0, - 1):
        if num % i == 0 and isPrime(i):
            return(i)

print(lrgstPrimeFac(13195))
```