

# Euler Project #1,2,5

Stephanie McCoy

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```
# Problem 1
```

```
def isNice(x):  
    if x % 3 == 0:  
        return true  
    if x % 5 == 0:  
        return true  
    return false
```

```
sum = 0
```

```
for i in [0..999]:  
    if isNice(i):  
        sum += i
```

```
sum
```

```
233168
```

```
# Problem 2
```

```
seq = [1,2]
```

```
sum = 3
```

```
f_term = 2
```

```
even_sum = 2
```

```
while f_term < 4000000:
```

```
    term_1 = seq[len(seq)-2]
```

```
    term_2 = seq[len(seq)-1]
```

```
    f_term = term_1 + term_2
```

```
    seq.append(f_term)
```

```
    sum = sum + f_term
```

```
    if f_term > 4000000:
```

```
        sum = sum - f_term
```

```
    else:
```

```
        if f_term % 2 == 0:
```

```
            even_sum = even_sum + f_term
```

```
print(even_sum)
```

```
4613732
```

```
# Problem 5
```

```
primeProduct = 2*3*5*7*11*13*17*19
```

---

```
newProduct = primeProduct
multiplier = 1
divisor = 1
limit = 20
while divisor < limit:
    if newProduct % divisor == 0:
        divisor = divisor + 1
    else:
        newProduct = primeProduct * multiplier
        divisor = 1
        multiplier = multiplier + 1
print(newProduct)
232792560
```