**Project Euler Problems**

**Problem 1**

count=1

sum=0

while(count<1000):

if (count%3==0 & count%5==0):

sum= sum+count

elif count%3==0 or count %5==0:

sum= sum+count

count = count+1

print(sum)

**Result:** 233168

**Problem 2**

n=4000000

sum=0

fib=1

fib2=2

while (fib2<n):

tempNum=fib2

if fib2%2==0:

sum= sum+fib2

fib2= fib2 + fib

fib = tempNum

print(sum)

**Result:** 4613732

**Problem 3**

number=600851475143

i=1

while i\*i<number:

if(number%i==0):

number = number/i

i = i+1

print(number)

**Resutls:** 6857

**Problem 4**

maximum = 0;

for a in range (100, 1000):

for b in range (100, 1000):

product = a\*b

if (product > maximum) and str(product)==(str(product)[::-1]):

maximum=product

print (maximum)

**Result:** 906609

**Problem 5**

int multiple = 1;

int i=1;

while (i<=20)

{

if (multiple%i==0)

i+=1;

else

{

multiple = multiple+1;

i=1;

}

}

System.out.print(multiple);

**Result:** 232792560

**Problem 6**

sum1=0

sum2=0

i=1

while (i <=100):

sum1= sum1 +(i\*i)

sum2= sum2+i

i+=1

sum2= (sum2)\*\*2

print(sum2-sum1)

**Results:** 25164150

**Problem 9**

total=1000

multiple= 1

for a in range(1, total):

for b in range(1, total-1):

c= total-a-b

if (a\*\*2+b\*\*2)==c\*\*2:

multiple= a\*b\*c

print(multiple)

**Results:** 31875000

**Problem 16**

a=2\*\*1000

power = list(str(a))

total = sum(int(i) for i in power)

print(total)

**Results:** 1366