

1.

```
sum = 0

for i in range(1, 1001):
    if i % 3 == 0 or i % 5 == 0:
        sum=sum+i

print(sum)
```

```
>>> 234168
>>> |
```

2.

```
a,b=1,2
s=0
while a<=4000000:
    if a%2==0:
        s+=a
    a,b=b,a+b
print(s)
```

Output:

```
>> 4613732
>> |
```

6.

```

a=0
b=1
for i in range(0,101):
    a+=i
b=a**2

y=0
for j in range(0,101):
    y+=(j**2)

print(b-y)

```

```

>>> 25164150

```

7.

```

import math

def is_prime(number):
    if number <= 1:
        return False
    if number == 2:
        return True
    if number % 2 == 0:
        return False
    for i in range(3, int(math.sqrt(number)) + 1, 2):
        if number % i == 0:
            return False
    return True

n = 2
prime_count = 0

while prime_count < 10001:
    if is_prime(n):
        prime_count += 1
    n += 1

print(n - 1)

```

```

>>> 104743

```

9.

```
def f(sum):
    for a in range(1,sum):
        for b in range(a,sum-a):
            c = sum-a-b
            if a**2+b**2==c**2:
                return a,b,c

sum=1000
p=1
t=f(sum)
if t:
    a,b,c=t
    p=a*b*c
    print("The numbers are:",a,',',b,',',c,)
else:
    print("Numbers not found")
```

```
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The numbers are: 200 , 375 , 425
```