- Find GCD of two numbers.
- Write a program that flips a coin 100 times and then tells you the number of heads and tails.

Source code:

gcd.py - C:\Users\Senjuti\Desktop\Sem 5\Python\gcd.py

File Edit Format Run Options Window Help

```
a=int(input("Enter first number: "))
b=int(input("Enter second number: "))
if a>b:
    i=b
else:
    i=a
while i>=1:
    if a%i==0 and b%i==0:
        break
    i-=1
print("The GCD: ",i)
```

headTail.py - C:\Users\Senjuti\Desktop\Sem 5\Pythc

File Edit Format Run Options Window Help

```
import random
h,t=0,0
i=1
while i<=100:
    value=random.randrange (0,2)
    if value==0:
        h+=1
    else:
        t+=1
    i+=1
print("Total no. of Head :", h)
print("Total no. of Tail :", t)
```

Output:

```
>>>
============= RESTART: C:\Users\Senjuti\Desktop\Sem 5\Python\gcd.py ============
Enter first number: 35
Enter second number: 49
The GCD:  7
>>>
========== RESTART: C:\Users\Senjuti\Desktop\Sem 5\Python\headTail.py ==========
Total no. of Head : 40
Total no. of Tail : 60
>>>
========== RESTART: C:\Users\Senjuti\Desktop\Sem 5\Python\headTail.py ==========
Total no. of Head : 45
Total no. of Tail : 55
>>>
```

- **Write a program that will find all the Krishnamurthy numbers in a certain range.**
- **Write a program that will find all the Armstrong numbers in a certain range.**

Source code:

krishnamurthy.py - C:/Users/Senjuti/Desktop/Sem 5/Pyt

File Edit Format Run Options Window Help

```
l=int(input("Enter lower limit: "))
u=int(input("Enter upper limit: "))
if(l>u):
    print("Wrong input range")
else:
    print("Krishnamurthy numbers: ")
    while(l<=u):
        num=l
        sum=0
        while num>0:
            r=num%10
            f=1
            while r>0:
                f*=r
                r-=1
            sum+=f
            num//=10
        if sum==l:
            print(l," ")
        l+=1
```

armstrong.py - C:/Users/Senjuti/Desktop/Sem 5/Python

File Edit Format Run Options Window Help

```
l=int(input("Enter lower limit: "))
u=int(input("Enter upper limit: "))
if(l>u):
    print("Wrong input range")
else:
    print("Armstrong numbers: ")
    while(l<=u):
        num=l
        sum=0
        while num>0:
            r=num%10
            sum+=r**3
            num//=10
        if sum==l:
            print(l," ")
        l+=1
```

Output:

```
>>>
======== RESTART: C:/Users/Senjuti/Desktop/Sem 5/Python/krishnamurthy.py =======
Enter lower limit: 1
Enter upper limit: 150
Krishnamurthy numbers:
1
2
145
>>>
========== RESTART: C:/Users/Senjuti/Desktop/Sem 5/Python/armstrong.py =========
Enter lower limit: 100
Enter upper limit: 420
Armstrong numbers:
153
370
371
407
>>>
```