Binary.py

```
1 b=list(input("Input a binary number:
  "))
2 v = 0
3 for i in range(len(b)):
4     d = b.pop()
5     if d == '1':
6         v = v + 2**i
7 print("The decimal value of the number
  is", v)
```

```
Input a binary number: 11010
The decimal value of the number is 26
```

Fibonacci.py

```
1 n= int(input("Number of terms: "))
2 n1, n2 = 0, 1
3 c= 0
4 if n<= 0:
5    print("Enter a positive integer")
6 elif n== 1:
7    print("Fibonacci series:")
8    print(n1)
9 else:
10   print("Fibonacci series:")
11   while c<n:
12        print(n1)
13        nth = n1 + n2
14        n1 = n2
```

```
Number of terms: 5
Fibonacci series:
0
1
1
2
3
```

Average.py

```
1 s=0
2 print("Enter 10 numbers")
3 for i in range(1,11):
4     n=int(input("Enter number:"))
5     s+=n
6 print("The average of given 10 numbers
  is :",s/10)
7
```

```
Enter 10 numbers
Enter number:4
Enter number:7
Enter number:8
Enter number:9
Enter number:3
Enter number:34
Enter number:60
Enter number:12
Enter number:10
Enter number:50
The average of given 10 numbers is : 19.7
```

Pattern.py

```python
n=int(input("Enter number of rows:"))
for i in range(0, n):
    for j in range(0, i+1):
        print("* ",end="")
    print("\r")
```

```
Enter number of rows:4
*
* *
* * *
* * * *
```

MultiplicationTable.py

```
1 k=int(input("Enter a number: "))
2 for i in range(1,11):
3     print(k,'x',i,'=',k*i)
```

```
Enter a number: 8
8 x 1 = 8
8 x 2 = 16
8 x 3 = 24
8 x 4 = 32
8 x 5 = 40
8 x 6 = 48
8 x 7 = 56
8 x 8 = 64
8 x 9 = 72
8 x 10 = 80
```

GCD_HCF.py

```
n1=int(input("Enter 1st number: "))
n2=int(input("Enter 2nd number: "))
i=1
while(i<=n1 and i<=n2):
   if(n1%i==0 and n2%i==0):
      gcd = i
   i=i+1
print("GCD is", gcd)
if n1>n2:
      smaller=n2
else:
      smaller=n1
for i in range(1,smaller + 1):
      if((n1%i==0) and (n2%i==0)):
```

```
Enter 1st number: 45
Enter 2nd number: 70
GCD is 5
HCF is 5
```

Even_Odd.py

```
def Even_Odd(l):
    e=0
    o=0
    for i in l:
        if i%2==0:
            e+=1
        else:
            o+=1
    print("number of even numbers :",e)
    print("number of odd numbers :",o)
n=int(input("Enter no of elements in series: "))
l=[]
```

```
Enter no of elements in series: 4
Enter a number:4
Enter a number:5
Enter a number:8
Enter a number:12
number of even numbers : 3
number of odd numbers : 1
```

Rev.py

```
1 s=input("Enter a word:")
2 l=list(s.split())
3 if len(l)>1:
4     print("Enter only a single word")
5 else:
6     print("Reverse of given word
  is:",s[::-1])
```

Enter a word:dog
Reverse of given word is: god

Except.py

```
1 for i in range(0,7):
2     if i==0 or i%3!=0:
3         print(i)
```

```
0
1
2
4
5
```