

```
In [ ]: # Function for nth Fibonacci number
def Fibonacci(n):

    # Check if input is 0 then it will
    # print incorrect input
    if n < 0:
        print("Incorrect input")

    # Check if n is 0
    # then it will return 0
    elif n == 0:
        return 0

    # Check if n is 1,2
    # it will return 1
    elif n == 1 or n == 2:
        return 1
    else:
        return Fibonacci(n-1) + Fibonacci(n-2)
print(Fibonacci(9))
```

Write a Python Program to Count the Number of Digits in a Number

```
In [ ]: n=int(input("Enter number:"))
count=0
while(n>0):
    count=count+1
    n=n//10
print("The number of digits in the number is:",count)
```

Write a Python Program to Print Table of a Given Number

```
In [ ]: n=int(input("Enter the number to print the tables for:"))
for i in range(1,11):
    print(n,"x",i,"=",n*i)
```

Write a Python Program to Check if a Number is a Prime Number

```
In [ ]: a=int(input("Enter number: "))
k=0
for i in range(2,a//2+1):
    if(a%i==0):
        k=k+1
if(k<=0):
    print("Number is prime")
else:
    print("Number isn't prime")
```

Write a Python Program to Check if a Number is an Armstrong Number?

```
In [ ]: n=int(input("Enter any number: "))
a=list(map(int,str(n)))
b=list(map(lambda x:x**3,a))
if(sum(b)==n):
    print("The number is an armstrong number. ")
else:
    print("The number isn't an armstrong number. ")
```

Write a Python Program to Find the Second Largest Number in a List?

```
In [ ]: a=[]
n=int(input("Enter number of elements:"))
for i in range(1,n+1):
    b=int(input("Enter element:"))
    a.append(b)
a.sort()
print("Second largest element is:",a[n-2])
```

Write a Python Program to Swap the First and Last Value of a List?

```
In [ ]: a=[]
n= int(input("Enter the number of elements in list:"))
for x in range(0,n):
    element=int(input("Enter element" + str(x+1) + ":"))
    a.append(element)
temp=a[0]
a[0]=a[n-1]
a[n-1]=temp
print("New list is:")
print(a)
```

Write a Python Program to Check if a String is a Palindrome or Not

```
In [ ]: string=raw_input("Enter string:")
if(string==string[::-1]):
    print("The string is a palindrome")
else:
    print("The string isn't a palindrome")
```

Python Program to Count the Number of Vowels in a String

```
In [ ]: string=raw_input("Enter string:")
vowels=0
for i in string:
    if(i=='a' or i=='e' or i=='i' or i=='o' or i=='u' or i=='A' or i=='E' or i=='I' or i=='O' or i=='U'):
        vowels=vowels+1
print("Number of vowels are:")
print(vowels)
```

Write a program to reverse a number in Python

```
In [ ]: n=int(input("Enter number: "))
rev=0
while(n>0):
    dig=n%10
    rev=rev*10+dig
    n=n//10
print("The reverse of the number:",rev)
```

Python program to swap two number without using third variable

```
In [ ]: a = int(input("please give first number a: "))
b = int(input("please give second number b: "))
a=a-b
b=a+b
a=b-a
print("After swapping")
print("value of a is : ", a)
print("value of b is : ", b)
```

Anagram Program in Python

```
In [ ]: def anagramCheck(str1, str2):
    if (sorted(str1) == sorted(str2)) :
        return True
    else :
        return False

str1 = input("Please enter String 1 : ")
str2 = input("Please enter String 2 : ")
if anagramCheck(str1,str2):
    print("Anagram")
else:
    print("Not an anagram")
```

Write a program in Python to print the Fibonacci series using iterative method

```
In [ ]: first,second=0,1
n = int(input("please give a number for fibonacci series : "))
print("fibonacci series are : ")
for i in range(0,n):
    if i<=1:
        result=i
    else:
        result = first + second;
        first = second;
        second = result;
    print(result)
```