1. Write a Python Program to Find the Factorial of a Number?
2. Write a Python Program to Display the multiplication Table?
3. Write a Python Program to Print the Fibonacci sequence?
4. Write a Python Program to Check Armstrong Number?
5. Write a Python Program to Find Armstrong Number in an Interval?
6. Write a Python Program to Find the Sum of Natural Numbers?

**Solution: 1**

def recursive\_factorial(number):

if number==1:

return 1

elif number==0:

return 0

else:

return(number\*recursive\_factorial(number-1))

n = int(input("Enter the number for which you want to find the factorial of "))

print(recursive\_factorial(n))

**Solution: 2**

n= int(input("Enter the nuumber for which you want to see the multiplication table "))

m= int(input("Enter the range for the multiplication table "))

for i in range(1,m+1):

print("{0} X {1} = {2} ".format(n,i,i\*n))

**Solution: 3**

def fibonacci\_rec(n):

if n <= 1:

return n

else:

return(fibonacci\_rec(n-1) + fibonacci\_rec(n-2))

n\_terms= 10

# check if the number of terms is valid

if n\_terms <= 0:

print("Invalid input ! Please input a positive value")

else:

print("Fibonacci series:")

for i in range(n\_terms):

print(fibonacci\_rec(i))

**Solution: 4**

n= int(input("Enter the number"))

a = n # we are makming a copy of the number, since we are destroying/ odifying the original number by performing modulo operation and division operation

sum = 0

while n!=0:

rem = n%10

sum = sum + (rem\*\*3)

n = n//10

if(sum == a):

print("the given number {0} is armstrong number".format(a))

else:

print("the given number {0} is not armstrong number".format(a))

**Solution: 5**

def check\_armstrong(num):

#n= int(input("Enter the number"))

a = num # we are makming a copy of the number, since we are destroying/ odifying the original number by performing modulo operation and division operation

sum = 0

while num!=0:

rem = num%10

sum = sum + (rem\*\*3)

num = num//10

if(sum == a):

print(a)

else:

pass

lower\_limit, upper\_limit = list(map(int, input("Enter the lower limit and upper limit for the given range ").split()))

for i in range(lower\_limit, upper\_limit):

if check\_armstrong(i)==None:

pass

else:

print(check\_armstrong(i))

**Solution: 6**

n=int(input("Enter the natural number"))

sum =0

for i in range(1, n+1):

sum=sum+i

print(“Sum of Natural numbers is ”,sum)