1. Write a Python Program to Find the Factorial of a Number?

def factorial(n):

if n<1:

return 1

else:

return n\*factorial(n-1)

n=int(input('Enter a number'))

fact=factorial(n)

print(f'The factorial of {n} is {fact}')

1. Write a Python Program to Display the multiplication Table?

def gen\_mul\_table(x,n):

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

print(f'{x}X{i}={i\*x}')

x=int(input('enter base'))

n=int(input('enter no of entry'))

value=gen\_mul\_table(x,n)

1. Write a Python Program to Print the Fibonacci sequence?

def fibonacci(n):

a=1

b=1

l=[]

for i in range(n):

l.append(a)

a,b=b,a+b

return l

fibonacci(n)

1. Write a Python Program to Check Armstrong Number?

def check\_armstrong(n):

sum=0

for char in range(len(n)):

sum=sum+pow(int(n[char]),3)

if sum==int(n):

print(f'{n} is armstrong number')

else:

print(f'{n} is not armstrong number')

n=input('enter number')

check\_armstrong(n)

1. Write a Python Program to Find Armstrong Number in an Interval?

def check\_armstrong(n,bin):

sum=0

for char in range(len(n)):

sum=sum+pow(int(n[char]),3)

if sum==int(n):

bin.append(int(n))

start\_range=int(input('enter starting number'))

end\_range=int(input('enter end number'))

bin=[]

if start\_range>end\_range:

print('start\_range cannot be greater than end\_range')

else:

for n in range(start\_range,end\_range+1):

check\_armstrong(str(n),bin)

print(f'The Armstrong numbers between {start\_range} and {end\_range} are {bin}')

1. Write a Python Program to Find the Sum of Natural Numbers?

def sum\_natural\_num(n):

if n<0:

print('enter positive number')

else:

sum=n\*((n+1)/2)

print(f'The sum of {n} natural number is {sum}')

n=int(input('enter number'))

sum\_natural\_num(n)