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

Ans 1 . num = int(input("Enter a number: "))

factorial = 1

if num < 0:

print("Factorial cannot be found for negative numbers")

elif num == 0:

print("Factorial of 0 is 1")

else:

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

factorial = factorial\*i

print("Factorial of",num,"is",factorial)

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

Ans 2 . num = int(input("Enter a number: "))

# use range() function to iterate through numbers

for i in range(1, 11):

print(num, "x", i, "=", num\*i)

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

Ans3 . n = int(input("Enter the number of terms: "))

# first two terms

a, b = 0, 1

# use a while loop to generate the sequence

count = 0

if n <= 0:

print("Please enter a positive integer")

elif n == 1:

print("Fibonacci sequence upto",n,":")

print(a)

else:

print("Fibonacci sequence:")

while count < n:

print(a)

c = a + b

# update values for the next iteration

a = b

b = c

count += 1

1. Write a Python Program to Check Armstrong Number?

Ans 4. num = int(input("Enter a number: "))

order = len(str(num))

sum = 0

temp = num

while temp > 0:

digit = temp % 10

sum += digit \*\* order

temp //= 10

if num == sum:

print(num,"is an Armstrong number")

else:

print(num,"is not an Armstrong number")

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

ans 5. lower = int(input("Enter the lower limit: "))

upper = int(input("Enter the upper limit: "))

for num in range(lower, upper + 1):

order = len(str(num))

sum = 0

temp = num

while temp > 0:

digit = temp % 10

sum += digit \*\* order

temp //= 10

if num == sum:

print(num)

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

Ans6 num = int(input("Enter a number: "))

# calculate sum using formula n(n+1)/2

if num < 0:

print("Enter a positive number")

else:

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

print("Sum of first", num, "natural numbers is", sum)