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

Ans1

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

factorial = 1

if num < 0:

print("Factorial does not exist 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?

Ans2

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

for i in range(1, 101):

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

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

Ans3

n = int(input("How many terms do you want? "))

a = 0

b = 1

if n <= 0:

print("Please enter a positive integer")

elif n == 1:

print("Fibonacci sequence up to", n, ":")

print(a)

else:

print("Fibonacci sequence:")

print(a)

print(b)

for i in range(2, n):

c = a + b

a = b

b = c

print(c)

4. Write a Python Program to Check Armstrong Number?

Ans4

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

num\_str = str(num)

num\_digits = len(num\_str)

sum = 0

for digit in num\_str:

sum += int(digit)\*\*num\_digits

if num == sum:

print(num, "is an Armstrong number")

else:

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

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

Ans5

lower = int(input("Enter the lower bound of the interval: "))

upper = int(input("Enter the upper bound of the interval: "))

print("Armstrong numbers between", lower, "and", upper, "are:")

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

num\_str = str(num)

num\_digits = len(num\_str)

sum = 0

for digit in num\_str:

sum += int(digit)\*\*num\_digits

if num == sum:

print(num)

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

Ans6

n = int(input("Enter a positive integer: "))

sum = 0

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

sum += i

print("The sum of first", n, "natural numbers is:", sum)