**Assignment No. 1**

**Amad Ud Din Gakkhar**

**CMS Id 364715**

#### SWAP TWO NUMBERS ####

a = input("Enter Number a ")

b = input("Enter Number b ")

a1 = a

b1 = b

print("Swapped Numbers are a = ", b1)

print("Swapped Numbers are b = ", a1)

#### CALCULATE FACTORIAL ####

f = int(input("Enter the number to calculate its factorial "))

fact = 1

while f >= 1:

fact = fact \* f

f = f-1

if f == 0:

break

print ("Factorial is ", fact)

#### CALCULATE FIBONACCI SERIES ####

x = int(input("Enter the number of elemetns in the series "))

f = [0,1]

for i in range(0,x):

t = f[(len(f) - 1)] + f[(len(f) - 2)]

f.append(t)

print ("Fibonacci Series \n",f)

#### STRING OPERATIONS ####

string1 = input("Enter sample string 1 ")

string2 = input("Enter sample string 2 ")

print ("Length of string 1 ", len(string1))

print ("Length of string 2 ", len(string2))

string3 = string1 + string2

print ("Concatenated String ", string3)

print ("First 3 letters in the string (Substring)", string3[0:3] )

#### CALCULATOR ####

a = float(input("Enter First Number "))

b = float(input("Enter Second Number "))

sum = a+b

sub = a-b

mul = a\*b

div = a/b

print ("The Sum is ", sum)

print ("The Difference is ", sub)

print ("The Mutiplication is ", mul)

print ("The Division is ", div)