Task-1 : Running python script and various expressions in an interactive interpreter

Aim : To run python script and various expressions in an interactive interpreter.

a. create a python program to enter two numbers and then performs and displays the results of the following operations addition, subtraction, multiplication, and division.

Algorithm :

1. Start
2. Get the two numbers and store it in variable x and y.
3. For Addition do ; x+y and print it.
4. For Subtraction do ; x - y and print it
5. For Multiplication do ; x * y and print it
6. For Division do ; x / y and print it.
7. Stop.

Program :

```
x = int(input("Enter the First number:"))
y = int(input("Enter the second number:"))
add = x+y
sub = x-y
pro = x*y
div = x/y
```

5) create a python program to enter two numbers and then performs and displays the results of the following relational expression: >, <, ==, !=, >==, <==

Algorithm :-

1. Start
2. Get the input from the user and store it in a, b & c
3. Perform the relational operations.
4. Start / Print the results.
5. Stop.

Program :-

```
# Initializing the value of a, b and c
a = int (input ("Enter the First number:"))
b = int (input ("Enter the second number:"))
c = int (input ("Enter the Third number"))
# using relational operations.
Print (a, ">", b, "is", a>b)
print (a, "<", b, "is", a<b)
Print (c, "==", a, "is", c==a)
print (c, "!=", b, "is", c!=b)
print (a, ">=", b, "is", a>=b)
print (b, "<=", a, "is", b<=a)
```

```
Print ("Addition", add)
print ("subtraction", sub)
Print ("Multiplication", pro)
print ("Division", div)
```

Out put :-

```
Enter the First number : 5
Enter the second number : 6
Addition : 11
Subtraction : -1
Multiplication : 30
Division : 0.8333333334
```

Result :- Thus, the python program to run python script and various expressions in an interactive interpreter was done successfully and the output was verified.

c) Create a python program to enter three numbers and then performs and display the results of the following logical operations : and, or, not.

Algorithm :-

1. start
2. Get the input from the user.
3. perform the logical operations on the inputs.
4. Print the results.
5. Stop.

program :-

```
#taking three numbers as input
a = int(input("Enter the First number:"))
b = int (input ("Enter the second number:"))
c = int (input ("Enter the Third number:"))
# performing logical operations
print ("In Logical operations Results:")
print ( a>b) and (b>c))
print (a>b) or (b>c))
print ( not (a>b))
print (not (b>c))
```

Output :-

Enter the first number : 5
Enter the second number : 6
Enter the third number : 7
5 > 6 is False
5 < 6 is True
7 == 5 is False
7 != 6 is True
5 >= 6 is False
6 <= 5 is False.

Output :

```
Enter the First number : 5
Enter the second number : 6
Enter the Third number : 7
Logical operations results :
False
False
True
True
```

Result : Thus, the python program to run python script and various expressions in an interactive interpreter was done successfully and the output was verified.