

## **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

print("Addition:",add)
print("Subtraction :",sub)
print("Multiplication:",pro)
print("Division:",div)
```

### **Output:**

```
===== RESTART: C:\Users\919\9\Desktop\t.py
Enter the First number:5
Enter the Second number:6
Addition: 11
Subtraction : -1
Multiplication: 30
Division: 0.8333333333333334
```

- b. 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 the input from the user and store it in a,b&c.
- 3.Perform the relational operations( i.e, >,<,==,!=,>=,<=).
- 4.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 operators
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)
```

**Output:**

```
===== RESTART: C:\Us
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
```

- c. Create a python program to enter three numbers and then performs and displays 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("\nLogical Operations Results:")
print((a > b) and (b > c))
print((a > b) or (b > c))
print(not(a > b))
print(not(b > c))
```

**Output**

```
===== RESTART: C:\Users\DELL\PycharmProjects\PythonProject\venv\Scripts\python.exe
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 run successfully and the output was verified.