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 itin variable x and y.
3. For addition do; x+y and print it.
4. for subtration do; x-y and print it.
5. For Multiplication do; x*y and print it.
6. for division do; x/y and print it.

Program:-

```
x=int(input("enter the firstnumber:"))
y=int(input("enterthe secondnumber:"))
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:-

```
Enter the first number:5
Enter the second number:6
Addition:11
Subtraction:-1
Multiplication:30
Division:0.8333333333334
```

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 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 operations
Print (a,">", b, "is", a>b)
Print (a,"<", b, "is", a<b)
Print (c, "==", a, "is", c==a)
Print (c, "!=", a, "is", c!=b)
Print (a, ">=", b, "is", a>=b)
Print (b, "<=", a, "is", b<=a)
```

output:-

Enter the first number: 9
enter the second number : 4
enter the third number: 6

9>4 is True
9<4 is false
6==9 is false
6!=9 is ture
9>=4 is True
4<=9 is True

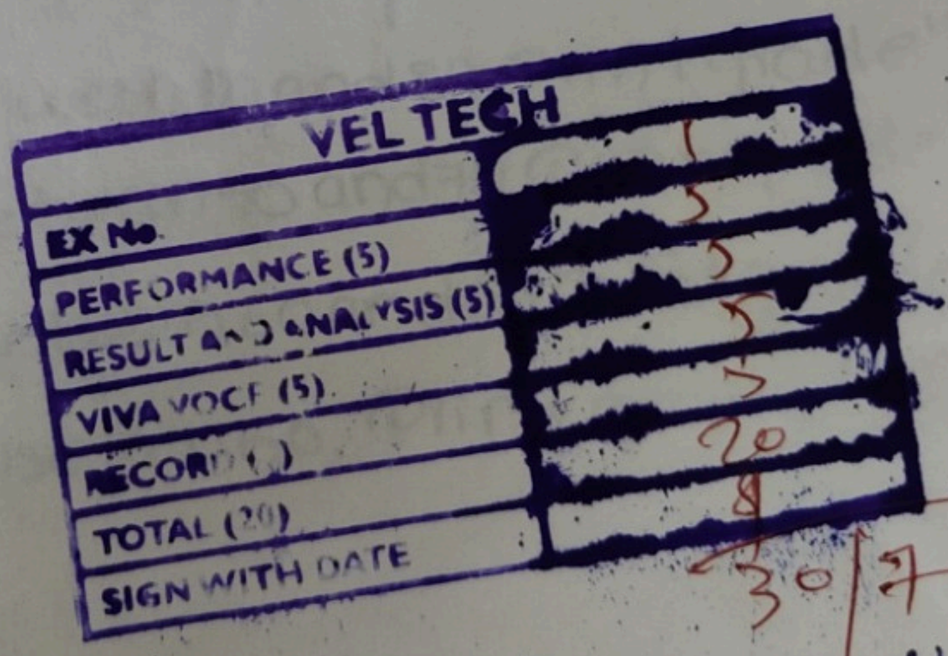
c) Create a python program to enter three number and then performs and displays the results of the following logical operations: and, or, not.

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("\n logical operations Results:")
Print((a>b) and (b>c))
Print((a>b) or (b>c))
Print(not((a>b))
Print(not(a>b))
Print(not(b>c))
```



Result:-

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

output:

```
Enter the first number: 6
Enter the second number: 7
Enter the Third number: 8
logical operations results:
False
False
True
True
```