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)
```

VEL TECH	
EX No.	1
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	5
TOTAL (25)	20
SIGN WITH DATE	30/1

Output:- RESTART: C:\Users\919\9\Desktop\t.p)

```
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 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)
```

VEL TECH	
EX No.	
PERFORMANCE (5)	
RESULT AND ANALYSIS (5)	
VIVA VOCE (5)	
RECORD (5)	
TOTAL (20)	
SIGN WITH DATE	

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("\n logical operations result:")
print((a>b) and (b>c))
print((a>b) or (b>c))
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 don successfully and the output was verified.

Ex. No.	
VIVA VOCE (5)	
RECORD (5)	
TOTAL (20)	
SIGN WITH DATE	

Output:-

```
========== RESTART: C:\Use
Enter the First number: 5
Enter the second number: 6
Enter the third number: 7
logical operations Results:
False
False
True
True
```