

## TASK - 1

RUNNING PYTHON SCRIPT AND VARIOUS EXPRESSIONS IN A 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)
```

b. Create a python program to enter two numbers and then performs and displays the results of the following relational expression:  $>$ ,  $<$ ,  $=$ ,  $!=$ ,  $\geq$ ,  $\leq$

Algorithm:

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

Program:

```
# initializing the values of a,b & 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)
```

QUESTION

Output:

Enter the first number : 5

Enter the second number : 6

Addition : 11

Subtraction : -1

Multiplication : 30

Division : 0.8333333333333334

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

False to result soft logical &

((< relation first soft result) & (first > 0))

((< relation second soft result) & (second > 0))

((< relation third soft result) & (third > 0))

2nd logical result soft &

(d<0, "2i", d, "<", 0) fair

(d>0, "2i", d, ">", 0) fair

(d==0, "2i", d, "=", 0) fair

(d!=0, "2i", d, "!", 0) fair

(d<=0, "2i", d, "<=", 0) fair

(d>=0, "2i", d, ">=", 0) fair

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 input.
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:"))
# Performing logical operations
print ("In logical operation results:")
print ((a>b) and (b>c))
print (not (a>b))
print (not (b>c))
```

VELTECH	
EX No.	
PERFORMANCE (5)	
RESULT AND ANALYSIS (3)	
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RESULT: Thus, the python program to run scripts and various expressions in an interactive interpreter was done successfully and output was verified.