PYTHON LAB = 2

Q.1 Write a program for arithmetic operators.

Sol.

```
a = 7

b = 2

print ('Sum: ', a + b)

print ('Subtraction: ', a - b)

print ('Multiplication: ', a * b)

print ('Division: ', a / b)

print ('Floor Division: ', a // b)

print ('Modulo: ', a % b)

print ('Power: ', a ** b)
```

```
>>> ========== RESTART: C:/Users/narut/Desktop/New folder/Assignment2.py ==========
Sum:  9
Subtraction:  5
Multiplication:  14
Division:  3.5
Floor Division:  3
Modulo:  1
Power:  49
>>>
```

Q.2 Write a program for assignment operators.

Sol.

```
a = 10

b = 5

a += b

print(a)
```

```
========== RESTART: C:/Users/narut/Desktop/New folder/Assignment2.py ==========
15
>>>
```

Q.3Write a program for Bitwise operators .

Sol.

```
a=60

b=13

print ("a:",a, "b:",b, "a&b:",a&b)

print ("a:",a, "b:",b, "a|b:",a|b)

print ("a:",a, "b:",b, "a^b:",a^b)

print ("a:",a, "~a:", ~a)
```

```
================================================ RESTART: C:/Users/narut/Desktop/New folder/Assignment2.py ====================
a: 60 b: 13 a&b: 12
a: 60 b: 13 a|b: 61
a: 60 b: 13 a^b: 49
a: 60 ~a: -61
```

Q4. Write a program to calculate greatest of three numbers.

```
num1 = 10

num2 = 14

num3 = 12

if (num1 >= num2) and (num1 >= num3):

   largest = num1

elif (num2 >= num1) and (num2 >= num3):

   largest = num2

else:

   largest = num3

print("The largest number is", largest)
```

```
================================================ RESTART: C:/Users/narut/Desktop/New folder/Assignment2.py ================
The largest number is 14
>>>
```

Q5. Calculate the area of a circle.

```
radius = 5
pi = 3.14159
area = pi * (radius ** 2)
print("The area of the circle is ",area)
```

```
========== RESTART: C:/Users/narut/Desktop/New folder/Assignment2.py ==========
The area of the circle is  78.53975
>>>
```

Q6. Calculate the area of a triangle.

```
a = 5
b = 6
c = 7
s = (a + b + c) / 2
area = (s*(s-a)*(s-b)*(s-c)) ** 0.5
print('The area of the triangle is ', area)
```

```
========== RESTART: C:/Users/narut/Desktop/New folder/Assignment2.py ==========
The area of the triangle is  14.696938456699069
>>>
```

Q7. Calculate the area of a triangle.

```
width = 4
height = 5
Area = width * height
print("Area of rectangle = ",Area)
```

```
========== RESTART: C:/Users/narut/Desktop/New folder/Assignment2.py ==========
Area of rectangle =  20
>>>
```

Ln: 42

Q8.Calculate the area of a square.

```
side = 5

area = side ** 2

print("The area of the square is:", area)
```

```
========== RESTART: C:/Users/narut/Desktop/New folder/Assignment2.py ==========
The area of the square is: 25
>>>
```