

Q.1 Write a program for arithmetic operators

```
a = 10
b = 5
print("Addition:", a + b)
print("Subtraction:", a - b)
print("Multiplication:", a * b)
print("Division:", a / b)
print("Modulus:", a % b)
print("Exponentiation:", a ** b)
print("Floor Division:", a // b)
```

Q.2 Write a program for assignment operators

```
x = 10
x += 5 # x = x + 5
print("Add and assign:", x)
x -= 3 # x = x - 3
print("Subtract and assign:", x)
x *= 2 # x = x * 2
print("Multiply and assign:", x)
x /= 4 # x = x / 4
print("Divide and assign:", x)
x %= 3 # x = x % 3
print("Modulus and assign:", x)
```

Q.3 Write a program for Bitwise operators

```
a = 10
b = 4
print("AND:", a & b)
print("OR:", a | b)
print("XOR:", a ^ b)
print("NOT:", ~a)
print("Left Shift:", a << 2)
print("Right Shift:", a >> 2)
```

Q.4 Write a program to calculate greatest of three numbers.

```
a = 10
b = 20
c = 15
greatest = a
if b > greatest:
    greatest = b
if c > greatest:
    greatest = c
print("The greatest number is:", greatest)
```

Q.5 Calculate the area of a circle.

```
import math
radius = 7
area = math.pi * (radius ** 2)
print("Area of the circle:", area)
```

Q.6 Calculate the area of a triangle.

```
import math
radius = 7
area = math.pi * (radius ** 2)
print("Area of the circle:", area)
```

Q.7. Calculate the area of a rectangle.

```
length = 8
width = 6
area = length * width
print("Area of the rectangle:", area)
```

Q.8. Calculate the area of a square

```
side = 4
area = side ** 2
print("Area of the square:", area)
```