# Day 2 Operators

```python
a = 20
b = 10

#Write a program for arithmetic operators
print("Write a program for arithmetic operators")

#Addition
Addition = a + b #Adds two values
print("Addition: ",Addition) #it will give an output of adding 2
numbers

#Subtraction
Subtraction = a - b #Subtracts the right operand from left operand
print("Subtraction: ",Subtraction) #it will give an output of
subtracting 2 values

#Multiplication

Multiplication= a * b #multiplies two values
print("Multiplication: ",Multiplication) #it will give an output of
multiplying 2 values

#Division
Division = a / b #divides left operand by right operand
print("Division",Division) #it will give an output for dividing 2
values

#Division
Modulus= a ** b #divides left operand by right operand
print("Modulus",Modulus) #it will give an output for modulus of 2
values

#//Floor Division
Floor_division = a // b #divides left operand by right operand
print("Floor Division",Floor_division) #it will give an output for
floor division
print("-------------------------------------------")

print("Write a program for assignment operators")
```

```python
# == (Equal to): Checks if two values are equal.
is_equal = a==b
print("a is equal to b: ",is_equal)

# != (Not equal to): Checks if two values are not equal.
is_not_equal = (a != b)
print("a is not equal to b: ",is_not_equal)

# < (Less than): Checks if the left operand is less than the right
operand.
is_less_than = (a < b)
print("a is less than b: ",is_less_than)

# > (Greater than): Checks if the left operand is greater than the
right operand.
is_greater_than = (a < b)
print("a is greater than b: ",is_greater_than)

# <= (Less than or equal to): Checks if the left operand is less than
or equal to
# the right operand.
is_less_than_equal = (a <= b)
print("a is less than equal to b: ",is_less_than_equal)

# >= (Greater than or equal to): Checks if the left operand is
greater than or equal
# to the right operand.
is_greater_than_equal = (a >= b)
print("a is greater than equal to b: ",is_greater_than_equal)
print("------------------------------------------")

print("Write a program for Bitwise operators")
x = True
y = False
# and (Logical AND): Returns True if both conditions are True.
result_and = x and y
print("Both conditions are true: ",result_and)

# or (Logical OR): Returns True if at least one condition is True.
result_or = x or y
print("At least one condition is true: ",result_or)

# not (Logical NOT): Inverts the result of the condition.
```

```python
result_not = not x
print("Inverse result of x: ",result_not)
print("-------------------------------------------")
print("Write a program to calculate greatest of three numbers")
num1 = 20
num2 = 30
num3 = 40

greatest = max(num1,num2,num3)
print("Greatest number is:",greatest)

print("-------------------------------------------")

print("Calculate the area of a circle.")
pi = 3.14
radius =5
area_of_circle = pi * (radius*radius)
print("area of circle:",area_of_circle)
print("Calculate the area of a triangle.")
b = 10
h = 15
area_of_triangle = 1/2*b*h
print("area of triangle:",area_of_triangle)
print("Calculate the area of a rectangle.")
l = 10
b = 20
area_of_rectangle = l * b
print("area of rectangle:",area_of_rectangle)
print("Calculate the area of a square.")
side = 5
area_of_square = side*side
print("area of square:",area_of_square)
print("-------------------------------------------")
```