**Operators in Python**



**Arithmetic Operators**

Arithmetic operators are used to perform mathematical operations like addition, subtraction, multiplication and division.

In [1]:



a**=**10

b**=**20

add**=**a**+**b

sub**=**a**-**b

mul**=**a**\***b

div**=**a**/**b

mod**=**a**%**b

power**=**a**\*\***2

print(add)

print(sub)

print(mul)

print(div)

print(mod)

print(power)

30

-10

200

0.5

10

100

**Relational Operators**

Relational operators compares the values. It either returns True or False according to the condition.

In [9]:



x**=**20

y**=**100

print(a**>**b)

print(a**<**b)

print(a**==**b)

print(a**>=**b)

print(a**<=**b)

True

False

False

True

False

**Logical Operators**

Logical operators perform Logical AND, Logical OR and Logical NOT operations.

In [5]:



a**=True**

b**=False**

print(a **and** b)

print(a **or** b)

print(**not** a)

False

True

False

**Bitwise Operators**

Bitwise operators acts on bits and performs bit by bit operation.

In [8]:



x**=** 20

y**=**34

print(x **&** y)

print(x **|** y )

print(**~** x)

print(x **^** y)

print(x**>>**2)

print(y**<<**2)

0

54

-21

54

5

136

**Assignment Operators**

Assignment operators are used to assign values to the variables.

In [22]:



a**=**20.5

b**=**50.7

c**=**a**+**b *#assign values to c*

print(c)

a**+=**b *# Add And operator*

print(a)

a**-=**b *#Subtract And operator*

print(a)

a**\*=**b *#Multiply And operator*

print(a)

a**/=**b *#Divide And operator*

print(a)

a**%=**b *#Modulus And operator*

print(a)

a**\*\*=**b *#Exponent And operator*

print(a)

​

x**=**10

y**=**29

x**&=**y *#Performs bitwise And*

print(x)

x**|=**y *#Performs bitwise Or*

print(x)

x**>>=**y *#Performs Bitwise right shift*

print(x)

x**<<=**y *#Performs Bitwise left shift*

print(x)

71.2

71.2

20.5

1039.3500000000001

20.5

20.5

3.2056843390746602e+66

8

29

0

0