Operators

Arthimetic Operators

In [2]:
```
x1,y1= 10,5
```

In [3]:
```
x1+y1
```

Out[3]: 15

In [4]:
```
x1-y1
```

Out[4]: 5

In [5]:
```
x1*y1
```

Out[5]: 50

In [6]:
```
x1/y1
```

Out[6]: 2.0

In [7]:
```
x1//y1
```

Out[7]: 2

In [8]:
```
x1%y1
```

Out[8]: 0

In [9]:
```
x1**y1
```

Out[9]: 100000

In [10]:
```
3**2
```

Out[10]: 9

Assignment Operators

In [11]:
```
x=2
x
```

Out[11]: 2

In [12]:
```
x=x+2
x
```

Out[12]: 4

In [13]:
```
x+=2
x
```

Out[13]: 6

In [14]:
```
x+=2
x
```

Out[14]: 8

In [15]:
```
x*=2
x
```

Out[15]: 16

In [16]:
```
x-=2
x
```

Out[16]: 14

In [17]:
```
x/=2
x
```

Out[17]: 7.0

In [18]:
```
x//=2
x
```

Out[18]: 3.0

In [20]:
```
a,b=5,6
print(a)
print(b)
```

```
5
6
```

Uniary Operator

In [21]:
```
n=7
n
```

Out[21]: 7

In [22]:
```
m=-(n)
m
```

Out[22]: -7

In [23]:
```
n
```

Out[23]: 7

In [24]:
```
-n
```

Out[24]: -7

Relational Operator

In [25]:
```
a=5
b=6
a<b
```

Out[25]: True

In [26]:
```
a>b
```

Out[26]: False

In [27]:
```
a!=b
```

Out[27]: True

In [28]:
```
b=5
a==b
```

Out[28]: True

In [29]:
```
a>b
```

Out[29]: False

Logical Operator

In [32]:
```
a=5
b=4
a<8 and b<5
```

Out[32]: True

In [34]:
```
a<8 and b<2
```

Out[34]: False

In [35]:
```
a<8 or b<2
```

Out[35]: True

In [36]:
```
a> 8 or b<2
```

Out[36]: False

In [37]:
```
x=False
x
```

Out[37]: False

In [38]:
```
not x
```

Out[38]: True

In [39]:
```
x=not x
x
```

Out[39]: True

In [40]:
```
x
```

Out[40]: True

Number System Conversion

binary

In [41]:
```
25
```

Out[41]: 25

In [42]:
```
bin(25)
```

Out[42]: '0b11001'

In [44]:
```
int(0b11001)
```

Out[44]: 25

In [45]:
```
bin(30)
```

Out[45]: '0b11110'

Octal

In [46]:
```
oct(25)
```

Out[46]: '0o31'

Hexadecimal

In [47]:
```
0x19
```

Out[47]: 25

How to Swap 2 Variables in Python

In [48]:
```
a=5
b=6
```

In [49]:
```
a=b
b=a
```

In [50]:
```
print(a)
print(b)
```

```
6
6
```

In [51]:
```
a1=7
b1=8
```

In [52]:
```
temp=a1
a1=b1
b1=temp
```

In [53]:
```
print(a1)
print(b1)
```

```
8
7
```

In [54]:
```
a2=5
b2=6
```

In [55]:
```
a2=a2+b2
b2=a2-b2
a2=a2-b2
```

In [56]:
```
print(a2)
print(b2)
```

```
6
5
```

In [57]:
```
a2,b2
```

Out[57]: (6, 5)

In [58]:
```
a2=b2=b2,a2
```

In [59]:
```
print(a2)
print(b2)
```

```
(5, 6)
(5, 6)
```

Bitwise Operator

Compliment Operator

In [61]:
```
~12
```

Out[61]: -13

In [62]:
```
~46
```

Out[62]: -47

In [63]:
```
~54
```

Out[63]: -55

In [64]:
```
~10
```

Out[64]: -11

And Operator

In [65]:
```
12&13
```

Out[65]: 12

Or Operator

In [66]:
```
12|13
```

Out[66]: 13

In [67]:
```
35&40
```

Out[67]: 32

In [68]:
```
bin(35)
```

Out[68]: '0b100011'

In [69]:
```
print(bin(35))
print(bin(40))
```

```
0b100011
0b101000
```

In [70]:
```
35|40
```

Out[70]: 43

In [ ]:
```

```