Python operators(arthematic operators +,_,*,/,//,%)

```
In [1]: x1=10
        y1=20
        print(x1+y1)
```

30

```
In [2]: x1,y1=10,20
        print(x1+y1)
```

30

```
In [3]: a,b=5
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
Cell In[3], line 1
----> 1 a,b=5

TypeError: cannot unpack non-iterable int object
```

```
In [4]: a,b=10,5
        print(a-b)
```

5

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

Out[5]: -10

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

Out[6]: (20, 5)

```
In [7]: a-b
```

Out[7]: 15

```
In [8]: a*b
```

Out[8]: 100

```
In [9]: a/b
```

Out[9]: 4.0

```
In [10]: a//b
```

Out[10]: 4

```
In [11]: a%b
```

Out[11]: 0

```
In [12]: a**b
```

Out[12]:   3200000

In [13]:   `3**2`

Out[13]:   9

In [15]:   `5**2`

Out[15]:   25

In [18]:   ```
x2=3
y2=3
x2**y2
```

Out[18]:    27

Assignment operators(=,=+,=-,=*,=/,=//)

In [19]:    `x=2`

In [21]:    ```
x=x+2
x
```

Out[21]:   6

In [22]:   ```
x=x+2
x
```

Out[22]:    8

In [23]:    ```
x=x+2
x
```

Out[23]:   10

In [24]:   ```
x*=2
x
```

Out[24]:    20

In [25]:    ```
x-=2
x
```

Out[25]:   18

In [26]:   ```
x/=2
x
```

Out[26]:    9.0

In [27]:    ```
x//=2
x
```

Out[27]:   4.0

unary operator(-)

In [29]:
```
n=7
n
```

Out[29]: 7

In [31]:
```
m=-(n)
-n
```

Out[31]: -7

Relational operators(=,<,>,<=,>=)

In [32]:
```
a=5
b=6
a>b
```

Out[32]: False

In [33]:
```
a<b
```

Out[33]: True

In [34]:
```
a==b
```

Out[34]: False

In [35]:
```
a!=b
```

Out[35]: True

In [36]:
```
a=5
b=5
a<b
```

Out[36]: False

In [37]:
```
a==b
```

Out[37]: True

In [38]:
```
a!=b
```

Out[38]: False

In [39]:
```
a>=b
```

Out[39]: True

In [40]:
```
a<=b
```

Out[40]: True

logical operators(and,or not)

```
In [ ]:   a=5
          b=3
```

```
In [42]:   a<8 and b>2
```

Out[42]:   True

```
In [43]:   a<10 and b<2
```

Out[43]:   False

```
In [44]:   a<2 and b<1
```

Out[44]:   False

```
In [45]:   a<8 or b<2
```

Out[45]:   True

```
In [46]:   a>8 or b>5
```

Out[46]:   False

```
In [48]:   a<8 or b>2
```

Out[48]:   True

```
In [49]:   x=True
           x
```

Out[49]:   True

```
In [50]:   not x
```

Out[50]:   False

```
In [52]:   x
```

Out[52]:   True

```
In [54]:   not x
```

Out[54]:   False

complimentary operators(store negative values)

```
In [55]:   ~12
```

Out[55]:   -13

```
In [56]:   ~54
```

Out[56]:   -55

```
In [57]:   ~86
```

Out[57]: -87

Binarynumber system

In [59]: `25`

Out[59]: 25

In [60]: `bin(25)`

Out[60]: `'0b11001'`

In [62]: `0b11001`

Out[62]: 25

In [63]: `bin(36)`

Out[63]: `'0b100100'`

In [ ]: