

```
In [1]: 1 # OPERATORS in PYTHON
        2 # Arithmetic (+,-,*,/,%)
        3 # Assignment
        4 # Logical
        5 # Bitwise
        6 # Identity
```

```
In [2]: 1 # ARITHMATIC
        2
        3 add=1+2
        4 print(add)
```

3

```
In [3]: 1 expo=5**2
        2 print(expo)
```

25

```
In [4]: 1 div=20/4
        2 print(div)
```

5.0

```
In [5]: 1 floordiv=17/4
        2 print(floordiv)
```

4.25

```
In [6]: 1 floordiv=17//4      # It give value in roundfigure
        2 print(floordiv)
```

4

```
In [7]: 1 mod=7%3
        2 print(mod) # here we are getting remainder=1
```

1

```
In [8]: 1 num=24+12*32/8.0
        2 print(num)
```

72.0

```
In [9]: 1 sq=12**2
        2 print(sq)
```

144

```
In [10]: 1 # ASSIGNMENT
          2
          3 a=10
          4 print(a)
```

10

```
In [11]: 1 z=10
          2 z+=2
          3 print(z) # z=z+2 means 10=10+2 means 12
```

12

```
In [12]: 1 z=10
          2 z-=2
          3 print(z) # z=z-2 means 10=10-2 means 8
```

8

```
In [13]: 1 z=10
          2 z*=2
          3 print(z) # z=z*2 means 10=10*2 means 20
```

20

```
In [14]: 1 z=10
          2 z/=2
          3 print(z) # z=z/2 means 10=10/2 means 5
```

5.0

```
In [15]: 1 z=10
          2 z%=2
          3 print(z) # z=z%2 means 10=10%2 means 0
```

0

```
In [16]: 1 # STRINGMULTIPLICATION
          2
          3 s="s"*5
          4 print(s)
```

SSSSS

```
In [17]: 1 s1="s "*5
          2 print(s1)
```

s s s s s

```
In [18]: 1 stringjoin="Simran"+" "+"Pirjade"
        2 print(stringjoin)
```

Simran Pirjade

```
In [19]: 1 l1=[1,3,5,7]
        2 l2=[2,4,6,8]
        3 list=l1+l2           # Add two List
        4 print(list)
```

[1, 3, 5, 7, 2, 4, 6, 8]

```
In [20]: 1 print([5,6,7]*2)    # List multiplication
```

[5, 6, 7, 5, 6, 7]

```
In [21]: 1 # LOGICAL
        2 #AND= if both the statememnts are TRUE then it returns TRUE
        3 #OR= if one of the statment is true then it returns TRUE
        4 #NOT= If both statments are false/it is reverse to AND operator
```

```
In [22]: 1 z=10
        2 print(z>20 and z<20)    #10>20 and 10<20
```

False

```
In [23]: 1 z=10
        2 print(z>5 and z<12)    #10>5 and 10<12
```

True

```
In [24]: 1 z=5
        2 print(z>3 or z<4)      #5>3 or 5<4
```

True

```
In [25]: 1 z=5
        2 print(not(z>3 and z<10))    #5>3 and 5<10    #print(not(AND))
```

False

```
In [26]: 1 z=5
        2 print(z>3 != z<10)
```

True

```
In [27]: 1 # BITWISE
          2
          3 print(6&3)           # AND operator

          2
```

```
In [28]: 1 print(0&1)
          2 print(1&1)
          3 print(1&0)
          4 print(0&0)

          0
          1
          0
          0
```

```
In [29]: 1 print(33|3)           # OR

          35
```

```
In [30]: 1 print(6^3)           # XOR

          5
```

```
In [31]: 1 print(~3)            # NOT

          -4
```

```
In [32]: 1 print(~6)

          -7
```

```
In [33]: 1 print(3<<2)           # ZERO LEFT SHIFT

          12
```

```
In [34]: 1 print(8>>2)           # ZERO RIGHT SHIFT

          2
```

```
In [35]: 1 print(13>>3)

          1
```

```
In [36]: 1 # IDENTITY
          2
          3 # is and is not
```

```
In [37]: 1 a=["Hyundai","Kia"]
          2 b=["Hyundai","Kia"]
          3 c=a
          4 print(a==b)      #It returns True because both variables have the same job
          5 print(a is c)    #It returns True because c is the same object
```

True

True

```
In [38]: 1 a=["Hyundai","Kia"]
          2 b=["Hyundai","Kia"]
          3 c=a
          4 print(a is not c)    #'IS NOT is opposite to'
```

False

```
In [39]: 1 a=["Hyundai","Kia"]
          2 b=["Hyundai","Kia"]
          3 c=a
          4 print(a is c)
```

True

```
In [40]: 1 #IS Not- Return false if the next variable is the same object
```

```
In [41]: 1 a=["Hyundai","Kia"]
          2 b=["Hyundai","Kia"]
          3 c=a
          4 print(a!=c)
```

False