

# Operators

1. Airthematic Operators
2. Relational Operators
3. Logical Operators
4. Bitwise Operators
5. Assignment Operators

## 1. Airthematic Operators (+, -, x, /, //, %, ^)

```
In [3]: x = 5
y = 2

print(5+2)
print(5-2)
print(5*2) # x
print(5/2)
print(5//2) # return int value
print(5%2) # return reminder
print(5**2) # ^ (power of..)
```

7  
3  
10  
2.5  
2  
1  
25

## 2. Relational/ Comparison Operators (<, >, >=, <=, ==, !=)

```
In [4]: print(5<2) # less than
print(5>2) # greater than
print(5>=2) # greter equal
print(5<=2) # Less equal
print(5==2) # Qual
print(5!=2) # not qual
```

False  
True  
True  
False  
False  
True

## 3. Logical Operators (and, or, not)

```
In [6]: print(5 and 2)
print(5 or 2)
print(not 2)
```

2  
5  
False

## 4. Bitwise Operators (&, |, ^, <<, >>, ~)

```
In [9]: print(5&2) # and
print(5|2) # or
print(5^2) # xor
print(5<<2) #left shift
print(5>>2)# right shift
print(~5) # tilda
```

```
0
7
7
20
1
-6
```

## 5. Assignment Operators

```
In [12]: # = (assignment)

a = 2 # a is variable
print(a) # = is assignment operator, 2 is a literal

a += 2
print(a)
```

```
2
4
```

## 6. Membership Operators(in, not in)

```
In [17]: print('D' in 'Delhi')
print('D' not in 'Delhi')

print(1 in [2,3,4,5,6])
print(1 not in [2,3,4,5,6])
```

```
True
False
False
True
```

# Thank you!