Operators

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1 Arithmetic Operators

[5]:
```python
#Addition +

1+2+3
```

[5]: 6

[6]:
```python
#Subtraction -

30-4
```

[6]: 26

[7]:
```python
#Multiplication *

5*10
```

[7]: 50

[10]:
```python
#Division /

10 / 4
```

[10]: 2.5

[11]:
```python
#Modulus %

9 % 2
```

[11]: 1

[14]:
```python
#Floor Division //

10 // 3
```

[14]: 3

```
[15]: #Exponent **

      2**3
```

```
[15]: 8
```

```
[17]: x = 5
      y = 10

      print("x + y = ", x + y)
      print("x - y = ", x - y)
      print("x / y = ", x / y)
      print("x * y = ", x * y)
      print("x % y = ", x % y)
      print("x // y = ", x // y)
      print("x ** y = ", x ** y)
```

```
x + y =  15
x - y =  -5
x / y =  0.5
x * y =  50
x % y =  5
x // y =  0
x ** y =  9765625
```

2   Comparison Operators

```
[18]: x = 10
      y = 15
```

```
[19]: x > y
```

```
[19]: False
```

```
[20]: x < y
```

```
[20]: True
```

```
[23]: x == y
```

```
[23]: False
```

```
[24]: x != y
```

```
[24]: True
```

```
[25]: x != 2
```

```
[25]: True
```

```
[26]: x >= y
```

```
[26]: False
```

```
[27]: x <= y
```

```
[27]: True
```

3 Logical Operators

```
[29]: a = False
      b = True

      print("a and b is", a and b)
      print("a or b is", a or b)
      print("not a is", not a)
```

```
a and b is False
a or b is True
not a is True
```

```
[30]: 1 and 0
```

```
[30]: 0
```

```
[31]: 1 and 1
```

```
[31]: 1
```

```
[32]: True and True
```

```
[32]: True
```

```
[33]: False and False
```

```
[33]: False
```

```
[34]: False and True
```

```
[34]: False
```

```
[35]: 1 or 1
```

```
[35]: 1
```

```
[36]: 1 or 0
```

[36]: 1

[37]:
```python
False or True
```

[37]: True

[38]:
```python
not 0
```

[38]: True

[39]:
```python
not False
```

[39]: True

4 Assignment Operators

[40]:
```python
x = 10
```

[41]:
```python
x
```

[41]: 10

[42]:
```python
x+=5
```

[44]:
```python
x
```

[44]: 15

[45]:
```python
x-+5
```

[45]: 10

[46]:
```python
x*=2
```

[47]:
```python
x
```

[47]: 30

[48]:
```python
x/=4
```

[49]:
```python
x
```

[49]: 7.5

5 Identity Operators

```
[51]: x = 5
      y = 10

      print(x is not y)
      print(x is y)
```

```
True
False
```

6 Membership Operators

```
[52]: x = "Hi there"
      y = [1,2,3,4]
      print("H" in x)
      print(1 in y)
      print("t" in x)
      print(2 not in y)
```

```
True
True
True
False
```

```
[ ]:
```

```
[ ]:
```