

Arithmetic Operations in Python

In [1]: *# Integers*

```
In [2]: print('Addition: ', 1 + 2)
print('Subtraction: ', 2 - 1)
print('Multiplication: ', 2 * 3)
print('Division: ', 4 / 2)           # Division in python gives float
print('Division: ', 6 / 2)
print('Division: ', 7 / 2)
print('Division without the remainder: ', 7 // 2)   # gives without the floating nu
print('Modulus: ', 3 % 2)           # Gives the remainder
print('Division without the remainder: ', 7 // 3)
print('Exponential: ', 3 ** 2)     # it means 3 * 3
```

```
Addition: 3
Subtraction: 1
Multiplication: 6
Division: 2.0
Division: 3.0
Division: 3.5
Division without the remainder: 3
Modulus: 1
Division without the remainder: 2
Exponential: 9
```

In [3]: *# Float Numbers*

```
In [4]: print('Floating Number,PI', 3.14)
print('Floating Number, gravity', 9.81)
```

```
Floating Number,PI 3.14
Floating Number, gravity 9.81
```

In [5]: *# Complex Numbers*

```
In [17]: print('Complex number: ', 1 + 1j)
print('Multiplying complex number: ', (1 + 1j) * (1-1j))
```

```
Complex number: (1+1j)
Multiplying complex number: (2+0j)
```

```
In [19]: a=10+20j
print(a.real)
print(a.imag)
```

```
10.0
20.0
```

```
In [21]: print(int(a.real))
print(int(a.imag))
```

```
10  
20
```

```
In [23]: # Boolean
```

```
In [25]: print(6>4)
```

```
True
```

```
In [27]: print(6<2)
```

```
False
```

```
In [31]: print('malayalam'=='malayalam')
```

```
True
```

```
In [33]: print('malayalam'=='tamil')
```

```
False
```

```
In [35]: print('malayalam'=='Malayalam')
```

```
False
```

```
In [37]: print(len('malayalam')==len('malayalam'))
```

```
True
```

```
In [39]: print(len('malayalam')==len('tamil'))
```

```
False
```

```
In [41]: print('true'=='true')
```

```
True
```

```
In [45]: print('false'=='true')
```

```
False
```

```
In [47]: print(type('true'))
```

```
<class 'str'>
```

```
In [55]: print(not True)
```

```
False
```

```
In [53]: bool(True)
```

```
Out[53]: True
```

Calculating Areas

```
In [58]: radius=10  
area_of_circle=2.16*radius**2  
print('Area of Circle:',area_of_circle)
```

Area of Circle: 216.0

```
In [62]: length=40  
width=20  
area_of_rectangle=length*width  
print('Area of Rectangle:',area_of_rectangle)
```

Area of Rectangle: 800

```
In [72]: mass=89  
gravity=5.61  
weight= mass*gravity  
print(weight,'N')
```

499.29 N

In []:

In []: