

Python - (4) - Numbers

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1 Numbers

We are right now discussing two types of numbers in Python 1. Integers - whole numbers (+ve or -ve) e.g 7,0,-9 etc 2. Floats - Numbers with decimal points e.g 2.3,4.5, 5E4 etc

There is a third type of number also -> complex e.g 5j

```
In [1]: 1
```

```
Out[1]: 1
```

```
In [2]: # type() function gives the type of your data  
        type(1)
```

```
Out[2]: int
```

```
In [3]: type(2.3)
```

```
Out[3]: float
```

```
In [4]: type(5j)
```

```
Out[4]: complex
```

```
In [5]: #Float can also be scientific numbers with an "e" or "E" to indicate the power of 10.  
        5E3
```

```
Out[5]: 5000.0
```

```
In [6]: 5E100
```

```
Out[6]: 5e+100
```

```
In [7]: type(5E100)
```

```
Out[7]: float
```

2 Arithmetic Operations

```
In [8]: #Addition
        1+1
```

```
Out[8]: 2
```

```
In [9]: #Multiplication
        2*3
```

```
Out[9]: 6
```

```
In [10]: #Subtraction
        4-2
```

```
Out[10]: 2
```

```
In [11]: # True division
        3/2
```

```
Out[11]: 1.5
```

```
In [12]: # Floor division
        3//2
```

```
Out[12]: 1
```

```
In [16]: -17//5
```

```
Out[16]: -4
```

```
In [17]: # Modulus returns remainder after division
        5%2
```

```
Out[17]: 1
```

```
In [18]: 23%4
```

```
Out[18]: 3
```

```
In [19]: # exponent
        4**2
```

```
Out[19]: 16
```

```
In [20]: 5**5
```

```
Out[20]: 3125
```

```
In [21]: # Multiple Arithmetic Operation (BODMAS) BODMAS is an acronym and it stands for Brackets, Order, Division, Multiplication, Addition, Subtraction
        2 * 4 + 3 - 7 * 7
```

```
Out[21]: -38
```