

# 2\_operators

May 28, 2024

## 1 Operators and comparisons

Most operators and comparisons in Python work as one would expect:

- Arithmetic operators `+`, `-`, `*`, `/`, `//` (integer division), `**` power

```
(3, -1, 2, 25)
```

```
(3.0, -1.0, 2.0, 0.5)
```

```
2.0
```

```
8
```

**Note:** Division

The `/` operator always performs a floating point division in Python 3.x. This is not true in Python 2.x, where the result of `/` is always an integer if the operands are integers. To be more specific, `1/2 = 0.5 (float)` in Python 3.x, and `1/2 = 0 (int)` in Python 2.x (but `1.0/2 = 0.5` in Python 2.x).

The boolean operators are spelled out as the words `and`, `not`, `or`.

```
True
```

```
True
```

```
False
```

Comparison operators `>`, `<`, `>=` (greater or equal), `<=` (less or equal), `==` equality, `is` identical.

```
(True, False)
```

```
(False, False)
```

```
(True, True)
```

```
False
```

```
True
```