

Exploring arithmetic and logical operators interactively in the Python interpreter is a fantastic way to understand their behavior! Open the Python shell by typing `python` (or `python3`) in your terminal and try running these experiments:

Arithmetic Operators:

```
```python
```

```
>>> 10 + 5 # Addition
```

```
15
```

```
>>> 10 - 5 # Subtraction
```

```
5
```

```
>>> 10 * 5 # Multiplication
```

```
50
```

```
>>> 10 / 3 # Division (returns a float)
```

```
3.3333333333333335
```

```
>>> 10 // 3 # Floor division (returns an integer)
```

```
3
```

```
>>> 10 % 3 # Modulus (remainder after division)
```

```
1
```

```
>>> 2 ** 3 # Exponentiation (2 raised to the power of 3)
```

```
8
```

```
```
```

Logical Operators:

```
```python
```

```
>>> True and False # AND operation
```

```
False
```

```
>>> True or False # OR operation
```

```
True
```

```
>>> not True # NOT operation
```

```
False
```

```
>>> (5 > 3) and (10 > 5) # Both conditions are True
```

```
True
```

```
>>> (5 > 10) or (10 > 5) # At least one condition is True
```

```
True
```

```
>>> not (5 > 10) # Negates the False condition
```

```
True
```

```
```
```