

Exercises for Python Operators – Lecture 3

Take a look over the following questions. This lecture should help you answer each of them. We recommend you write down answers as you learn them.

3. four common types in Python are:

- i `integer (int)`
- f `float`
- s `string (str)`
- b `Boolean (bool)`

4. which operators are highest precedence (box them)? Lowest (circle them)?

- logical (`lowest`)
- comparison (`middle`)
- mathematical (`highest`)

5. how can we multiply two numbers in Python?

- 2 x 3
- `2 * 3`
- (2) (3)

6. how do we check whether two values are equal to each other in Python?

- 1 + 1 = 2
- `1 + 1 == 2`
- 1 + 1 equals 2

7. how can we print this message? [circle all that apply]

the dog said "roof"

- `print(the dog said "roof")`
- `print("the dog said "roof"")`
- `print('the dog said "roof"')`
- `print("the dog said \"roof\"")`

8. where should we add parentheses to get 16?

`(-4) ** 2`

9. what is the value of the following?

`not not True (True)`

Modular Arithmetic: what do each of the following evaluate to?

$0 \% 3$ (0)

$1 \% 3$ (1)

$2 \% 3$ (2)

$3 \% 3$ (0)

$4 \% 3$ (1)

$5 \% 3$ (2)

$6 \% 3$ (0)

$11 / 4$ (2.75)

$11 // 4$ (2)

$11 \% 4$ (3)

$(3 - 1 + 12) \% 12 + 1$ (3)

$(3 - 1 + 14) \% 12 + 1$ (5)

Boolean Logic: what do each of the following evaluate to?

$2 > 1$ (True)

$2 > 1 == \text{True}$ (True)

$\text{not } (3 < 1 \text{ or } 3 > 10)$ (True)

$\text{not } (3 < 1) \text{ and not } (3 > 10)$ (True)

$3 >= 1 \text{ and } 3 <= 10$ (True)

$1+2 == 1 \text{ or } 1+2 == 2 \text{ or } 1+2 == 3 \text{ or } 1+2 == 4 \text{ or } 1+2 == 5$
(True)

$1+1 == 2$ and $2+2 == 4$ and $3+3 == 100$ and $4+4 == 8$ (False)