

CSCI 145 · Quiz 1 Reference Sheet

TYPES WE'VE SEEN SO FAR

int	a whole number, positive or negative — e.g. -4, 0, 3
float	a number with a decimal point — e.g. 3.14, 10.0
bool	a Boolean value — True or False
str	a sequence of characters (text) — e.g. 'hi', "hi"

OPERATORS AND THEIR PRECEDENCE

Highest to lowest — Python evaluates higher rows first.

()	grouping
**	exponent
-x	negation (not the same as subtraction)
* / % //	multiplication, division, modulo, floor division
+ -	addition, subtraction
< > <= >= == !=	comparisons
not	logical negation
and	logical and
or	logical or
=	assignment — evaluated last

CODE EXECUTION & MEMORY MODEL

Python runs each line top to bottom. Assigning one variable to another copies its *current value* — it does not link the two names together.

```
x = 5
y = x
y = 50
```



WRITING FUNCTIONS

```
def double(x):
    """
    Double the input.
    Params: x (int/float/str) -- value to be doubled
    Returns: doubled value (int/float/str)
    """
    return x * 2
```

```
>>> double(5) + 1
11
>>> double(6.7)
13.4
```

The returned value becomes the value of the function call.