Data Types

string (str)
a sequence of characters within double quotes

"Hello"
"12345678"
"My name is…"
"!@#$%&"

character (chr)
a single character within single quotes

'a'   '8'   '@'   'Z'   '!'

*Note: Single quotes are not required for characters in Python, but it is good practice for other programming languages.

integer (int)
a whole number, positive or negative

0
-52
8675309
-1234

*Integers cannot start with 0.

floating-point (float)
a decimal, positive or negative

6.2389
-50.0
0.22
2756.9

boolean (bool)
True or False

2 == 2 → True
4 == 7 → False

*Words must be capitalized.

*Often used in if statements and while loops.

converting to int
insert other data type into int()

str to int
"5678" > int("5678") > 5678

float to int
*The number is cut off after the decimal point.
2.34 > int(2.34) > 2
10.75 > int(10.75) > 10

converting to str
insert other data type into str()

int to str
72 > str(72) > "72"

float to str
2.66 > str(2.66) > "2.66"

All data types must be the same when concatenating.

"Ella is " + 72 + " years old." → Error
"Ella is " + str(72) + " years old." → Ella is 72 years old.

"72" + 8 → Error
int("72") + 8 → 80