In Python, you can name your variables whatever you want, with some restrictions:

1. Variables must start with a letter or underscore

\_cats

2cats

2. The rest of the name must consist of letters, numbers, or underscores

cats2

hey@you

3. Names are case-sensitive

CATS != Cats

Cats != cats

Naming Conventions

Most variables should be snake\_case (underscores between words)

Variables that start and end with two underscores (called "dunder" for double underscore) are supposed to be private or left alone

Most variables should be also be lowercase, with some exceptions:

UpperCamelCase usually refers to a class (more on that later)

CAPITAL\_SNAKE\_CASE usually refers to constants (e.g. PI = 3.14)

DATA TYPES

Dynamic Typing

Data Types :

data type description

bool True or False values

int an integer (1, 2, 3)

str (string) a sequence of Unicode characters, e.g. "Ajay" or "程序设计"

list an ordered sequence of values of other data types, e.g. [1, 2, 3] or ["a", "b", "c"]

dict a collection of key: values, e.g. { "first\_name": "Chaitenya", "last\_name": "new" }

Python is highly flexible about reassigning variables to different types:

Dynamic Typing

awesomeness = True

print(awesomeness) # True

awesomeness = "a dog"

print(awesomeness) # a dog

awesomeness = None

print(awesomeness) # None

awesomeness = 22 / 7

print(awesomeness) # 3.142857142857143

COPY

We call this dynamic typing, since variables can change types readily.