Statements

If, elif , else

Control Flow

- We often only want certain code to execute when a particular condition has been met.

- For example, **if** my dog is hungry (some condition), then I will feed the dog (some action).

- To control this flow of logic we use some keywords:
  - **if**
  - **elif**
  - **else**

- Control Flow syntax makes use of colons and indentation (whitespace).

- This indentation system is crucial to Python and is what sets it apart from other programming languages.

Syntax of an **if** statement

```
if some_condition:
    # execute some code
```

Syntax of an **if/else** statement

```python
if some_condition:
    # execute some code
else:
    # do something else
```

Syntax of an **if/else** statement

```python
if some_condition:
    # execute some code
elif some_other_condition:
    # do something different
else:
    # do something else
```

Let's explore these concepts!

For Loops

Many objects in Python are "iterable", meaning we can iterate over every element in the object.

Such as every element in a list or every character in a string.

We can use for loops to execute a block of code for every iteration.

The term **iterable** means you can "iterate" over the object.

For example you can iterate over every character in a string, iterate over every item in a list, iterate over every key in a dictionary.

```python
my_iteration = [1,2,3]
for x in my_iteration:
    print(x)
```

>> 1

>> 2

>> 3

Let's code!