Lets begin to learn about 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 syntac makes use of colons and indentation (whitespace)

This indentation systems is crucial to Python and si what sets it apart from other programming lanaguages.

Syntax of an IF statement

if some_condition:

    #execute some code

Anything indentated after the if condition, will be executed.

We can also add an else statement to the if statement like so:

if some_condition:

    #execute some code

else:

    #do something else

We can also add an if/else statement, like so:

if some_condition:

    #execute some code

elif some_other_condition:

    # do something different

else:

    #do something else

```
In [1]:  if True:
             print ('ITS TRUE!')
```

ITS TRUE!

So we see above, the if TRUE (condition) then print 'ITS TRUE!'

We can also add an operator to our conditions like so:

In [2]:
```python
if 3 > 2:
    print ('ITS TRUE!')
```

ITS TRUE!

In [11]:
```python
hungry = True

if hungry:
    print ('FEED ME!')
```

FEED ME!

In [12]:
```python
hungry = False

if hungry:
    print ('FEED ME!')
```

Notice, when the condition is False, no execution.

What we can do is add an else statement like so! :) :

In [13]:
```python
hungry = False

if hungry:
    print ('FEED ME!')
else:
    print("Im not hungry")
```

Im not hungry

In [14]:
```python
hungry = True

if hungry:
    print ('FEED ME!')
else:
    print("Im not hungry")
```

FEED ME!

In [16]:
```python
loc = 'Bank'

if loc == 'Auto Shop':
    print("Cars are cool!")
else:
    print ("I do not know much.")
```

I do not know much.

We can check for other conditions using elif

In [17]:
```python
loc = 'Bank'

if loc == 'Auto Shop':
    print("Cars are cool!")
```

Loading [MathJax]/extensions/Safe.js

```
    elif loc == 'Bank':
        print ("Money is cool!")
    else:
        print ("I do not know much.")
```

Money is cool!

In [18]:
```
loc = 'Bank'

if loc == 'Auto Shop':
    print("Cars are cool!")
elif loc == 'Bank':
    print ("Money is cool!")
elif loc == 'Store':
    print("Welcome to the store!")
else:
    print ("I do not know much.")
```

Money is cool!

Now if we change the location, to Auto Shop, we will get a different result like so:

In [19]:
```
loc = 'Auto Shop'

if loc == 'Auto Shop':
    print("Cars are cool!")
elif loc == 'Bank':
    print ("Money is cool!")
elif loc == 'Store':
    print("Welcome to the store!")
else:
    print ("I do not know much.")
```

Cars are cool!

In [22]:
```
loc = 'Store'

if loc == 'Auto Shop':
    print("Cars are cool!")
elif loc == 'Bank':
    print ("Money is cool!")
elif loc == 'Store':
    print("Welcome to the store!")
else:
    print ("I do not know much.")
```

Welcome to the store!

If we change the loc to something that is not defined, we will get the else statement. Like so:

In [23]:
```
loc = 'Game'

if loc == 'Auto Shop':
    print("Cars are cool!")
elif loc == 'Bank':
    print ("Money is cool!")
elif loc == 'Store':
    print("Welcome to the store!")
else:
    print ("I do not know much.")
```

In [24]:
```python
name = 'Sammy'

if name == 'Frankie':
    print("Hello Frankie!")
elif name == 'Sammy':
    print("Hello Sammy")
else:
    print("What is your name?")
```

Hello Sammy

In [25]:
```python
name = 'Frankie'

if name == 'Frankie':
    print("Hello Frankie!")
elif name == 'Sammy':
    print("Hello Sammy")
else:
    print("What is your name?")
```

Hello Frankie!

In [26]:
```python
name = 'Keegan'

if name == 'Frankie':
    print("Hello Frankie!")
elif name == 'Sammy':
    print("Hello Sammy")
else:
    print("What is your name?")
```

What is your name?

In the next chapter, we will learn how to get user input.

In [ ]: