# if, elif, else Statements

`if` **Statements in Python allows us to tell the computer to perform alternative actions based on a certain set of results.**

**Verbally, we can imagine we are telling the computer:**

**"Hey if this case happens, perform some action"**

**We can then expand the idea further with** `elif` **and** `else` **statements, which allow us to tell the computer:**

**"Hey if this case happens, perform some action. Else, if another case happens, perform some other action. Else, if *none* of the above cases happened, perform this action."**

**Let's go ahead and look at the syntax format for** `if` **statements to get a better idea of this:**

```
if case1:
    perform action1
elif case2:
    perform action2
else:
    perform action3
```

# First Example

**Let's see a quick example of this:**

In [1]:

```
if True:
    print('It was true!')
```

```
It was true!
```

**Let's add in some else logic:**

In [2]:

```
x = False

if x:
    print('x was True!')
else:
    print('I will be printed in any case where x is not true')
```

```
I will be printed in any case where x is not true
```

## Multiple Branches

**Let's get a fuller picture of how far** `if`**,** `elif`**, and** `else` **can take us!**

**We write this out in a nested structure. Take note of how the** `if`**,** `elif`**, and** `else` **line up in the code. This can help you see what** `if` **is related to what** `elif` **or** `else` **statements.**

**We'll reintroduce a comparison syntax for Python.**

In [3]:

```
location = 'Bank'
```

```
if location == 'Auto Shop':
    print('Welcome to the Auto Shop!')
elif location == 'Bank':
    print('Welcome to the bank!')
else:
    print('Where are you?')
```

```
Welcome to the bank!
```

**Note how the nested `if` statements are each checked until a True boolean causes the nested code below it to run. You should also note that you can put in as many `elif` statements as you want before you close off with an `else`.**

**Let's create two more simple examples for the `if`, `elif`, and `else` statements:**

In [4]:

```
person = 'Sammy'

if person == 'Sammy':
    print('Welcome Sammy!')
else:
    print("Welcome, what's your name?")
```

```
Welcome Sammy!
```

In [5]:

```
person = 'George'

if person == 'Sammy':
    print('Welcome Sammy!')
elif person =='George':
    print('Welcome George!')
else:
    print("Welcome, what's your name?")
```

```
Welcome George!
```

# Indentation

**It is important to keep a good understanding of how indentation works in Python to maintain the structure and order of your code. We will touch on this topic again when we start building out functions!**

***Before ending this lecture we will quickly cover simple topic Python User Input.***

**Python allows for user input.**

**That means we are able to ask the user for input.**

**Python 3.6+ uses the input() method for taking input from user. For Example-**

In [6]:

```
#Taking string as input from user
username = input("Enter username: ")
print("Username is: " + username)
```

```
Enter username: jarvis
Username is: jarvis
```

In [ ]:

```

```