

## Year 9 - HT1 – Python Programming [Selection]

<b>Keywords:</b>	
Python	A high-level general-purpose programming language
Variables	A data item that may take on more than one value during the runtime of a program
Assignment	a statement in computer programming that is used to set a value to a variable name (e.g. name = "Adam")
Constants	a value that should not be altered by the program during normal execution
Integer	A whole number
String	A sequence of characters
Float	A decimal number
Identifier	The name given to a variable
if...else	A selection structure used when there are only two possible options in a scenario
if...elif...else	A selection structure used when there are more than two possible options in a scenario
Conditions	statements that are created which evaluates actions in the program and returns if it's true or false
Booleans	a data type with two possible values: true or false
Criteria	A requirement in a condition that must be met

### if...else statement:

```
a = 250
b = 80
if a > b:
    print("a is greater than b")
else:
    print("a is not greater than b")
```

### if...elif...else statement:

```
a = 250
b = 80
if a > b:
    print("a is greater than b")
elif a == b:
    print("a and b are both equal")
else:
    print("b is greater than a")
```

### Python uses the following logical conditions which can be used in if statements:

- Equals: ==
- Not Equals: !=
- Less than: <
- Greater than: >
- Less than or equal to: <=
- Greater than or equal to: >=

### Look out for the following if you have an error running your program:

- Missing brackets or speech marks
- Spelling errors in Python command words (e.g. input, etc)
- Where variable names are used that do not match the spelling of the variable that has been originally created