Conditional Statement in Python

In Python, conditional statements, primarily `if`, `elif`, and `else`, control the flow of execution based on specified conditions. The `if` statement evaluates a condition, and if `True`, its block of code runs. The optional `elif` and `else` further handle alternative outcomes, allowing for complex decision-making in programs.

Understanding `if` Statements

In [1]:
```
# The `if` statement is used to execute a block of code if a condition
x = 10

if x > 5:
    print("x is greater than 5")
```

```
x is greater than 5
```

Understanding `else` Statements

In [2]:
```
# The `else` statement captures anything which isn't caught by the pre
y = 3

if y > 5:
    print("y is greater than 5")
else:
    print("y is not greater than 5")
```

```
y is not greater than 5
```

Using `elif` for Multiple Conditions

In [3]:
```
# `elif` allows us to check multiple expressions for TRUE and execute
z = 5

if z > 10:
    print("z is greater than 10")
elif z < 10:
    print("z is less than 10")
else:
    print("z is equal to 10")
```

```
z is less than 10
```

Nested `if` Statements

In [4]:
```
# We can have `if` statements inside `if` statements, this is called r
a = 12

if a > 10:
    print("a is greater than 10")
    if a > 15:
        print("and also greater than 15!")
    else:
        print("but not greater than 15")
```

```
a is greater than 10
but not greater than 15
```

In [ ]:
```

```