Learning Journal 1.5

1. Object-Oriented Programming in Python means that “everything is an object” which can contain data which can hold attributes and/or properties, you can write methods and/or functions.
   - One of the benefits of OOP is that it makes the structure of the code reusable and easier to understand, maintain and debug.
   - Another benefit is that “classes” and “objects” help to organise code in a more logical manner which leads to easier collaboration between developers.

2. Objects in Python are instances of the class which can hold its unique attributes whereas Classes are like a template to create objects where the properties and methods can be defined.
   For example with Make-Up we can have attributes such as:
   - Brand name
   - Type
   - Ingredients

3.

Method	Description
Inheritance	Here is where a class can inherit attributes from its “parent class” or “base class”. This makes our code cleaner and we can avoid repeating or making small mistakes
Polymorphism	This is where a data attribute or method holds the same name across different classes or data types, difference is where it was defined, it performs different operations
Operator Overloading	Some special operators only function in the “operator overloading” method, it is a function specified to the operator that does not work in custom classes, we have for example ___add___()