**Inheritance and type of Inheritance**

Inheritance is a fundamental concept in object-oriented programming (OOP) where a new class (called the child or subclass) derives properties and behaviors (methods) from an existing class (called the parent or superclass). It allows for code reusability, where the child class can use or override methods and attributes of the parent class.

There are different types of inheritance, which include:

Single Inheritance:

In this type, a subclass inherits from only one parent class.

Example: A Dog class inherits from an Animal class.

Multiple Inheritance:

A subclass can inherit from more than one parent class.

Example: A FlyingCar class inherits from both Car and Aircraft classes.

Multilevel Inheritance:

A class inherits from another class, and then a third class inherits from the second one, creating a chain of inheritance.

Example: A Child class inherits from a Parent class, which in turn inherits from a Grandparent class.

Hierarchical Inheritance:

Multiple subclasses inherit from a single parent class.

Example: Both Cat and Dog classes inherit from a common Animal class.

Hybrid Inheritance:

A combination of two or more types of inheritance, such as multiple and multilevel inheritance.

Example: A class inherits from two classes and one of those classes also serves as a parent for another class.

**Polymorphism**

**Method Overloading-** it's not supported.

**Exception Handling-**

**Types of error-**

* syntax error
* type error
* ZeroDivision error

**methods-**

* try
* except
* else
* finally