**Polymorphism**

Polymorphism in Java is a fundamental concept in object-oriented programming that allows objects of different classes to be treated as objects of a common superclass. It enables methods to do different things based on the object that it is acting upon, even if they share the same name. There are two types of polymorphism in Java:

1. Compile-time polymorphism (Method Overloading): This occurs when multiple methods in the same class have the same name but different parameters (type or number).
2. Runtime polymorphism (Method Overriding): This occurs when a subclass provides a specific implementation of a method that is already defined in its superclass.

**Inheritance**

Inheritance in Java is a fundamental object-oriented programming concept that allows one class to inherit the properties and methods of another class. It promotes code reusability and establishes a hierarchical relationship between classes.

1. Parent Class (Superclass): The class whose properties and methods are inherited.
2. Child Class (Subclass): The class that inherits from the parent class.
3. extends Keyword: Used to establish inheritance.
4. Single Inheritance: A class inherits from one and only one class
5. Multi-level Inheritance: A class inherits from another class, which in turn inherits from another class.
6. Hierarchical Inheritance: Multiple child classes inherit from the same parent class.
7. Hybrid Inheritance: A combination of two or more types of inheritance, typically achieved using interfaces in Java.