# OOP

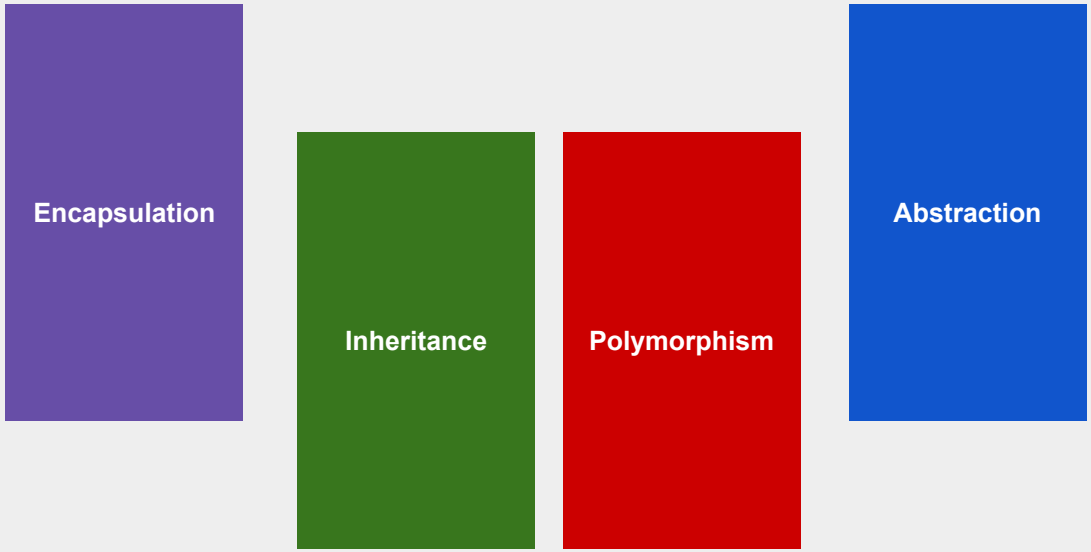
# What is OOP ?

Object oriented programming is a **new approach to overcome the drawbacks of a procedural oriented approach**. It divides programs into the number of entities called objects that contain data (variables) and functions/tasks (known as methods in java).

In an application, objects communicate with each other, share data among them, and solve problems

# Conceptions of OOP

# Pillars of OOP



# Class, Object, Field and Method

**Class** - A class — in the context of Java — is a template used to create objects and to define object data types and methods. Classes are categories, and objects are items within each category. All class objects should have the basic class properties.

**Object** - A Java object is a member (also called an instance) of a Java class. Each object has an identity, a behavior and a state. The state of an object is stored in fields (variables), while methods (functions) display the object's behavior. Objects are created at runtime from templates, which are also known as classes.

**Field** - A field is a class, interface, or enum with an associated value. Methods in the java. lang. reflect. Field class can retrieve information about the field, such as its name, type, modifiers, and annotations.

**Method** - A method is a block of code which only runs when it is called. You can pass data, known as parameters, into a method. Methods are used to perform certain actions, and they are also known as functions.

# Playing with classes and objects

# Interview Questions