# Q1.What is oops? List of Oops concept?

## **Ans**. Object-Oriented Programming or OOPs refers to languages that use objects in programming. Object-oriented programming aims to implement real-world entities like inheritance, hiding, polymorphism, etc in programming. The main aim of OOP is to bind together the data and the functions that operate on them so that no other part of the code can access this data except that function

## **List of oops concept**:

* **Class**
* **Objects**
* **Data Abstraction**
* **Encapsulation**
* **Inheritance**
* **Polymorphism**
* **Dynamic Binding**
* **Message Passing**

# Q2.What is difference between Oop and Pop?

## Ans. OOP and POP are two different programming paradigms.

## Oop is stand for Object-oriented programming and pop is for procedural-oriented programming.

OOP is based on the concept of **objects**, which are entities that have **attributes** (data) and **methods** . For example, a car object can have attributes like color, model, speed, etc. and methods like start, stop, accelerate, etc. Objects can also belong to **classes**, which are blueprints that define the common attributes and methods of a group of objects. For example, a car class can define the general properties and functions of all cars. Objects can also **inherit** attributes and methods from other classes, which allows code reusability and polymorphism. For example, a sedan class can inherit from the car class and add some specific features.

## OOP is more secure than POP because it allows data hiding and encapsulation. Data hiding means that the attributes of an object can be hidden from other objects or classes, which prevents unauthorized access or modification. Encapsulation means that the data and behavior of an object are wrapped together in a single unit, which makes the code more modular and maintainable.