Object Oriented Programming

Object oriented programming refers to the type of programming in which the programmers define the data type of a data structure and also the type of operations to be performed on data structures.

There are four major principles of object-oriented programming: -

1. **Encapsulation** – Encapsulation is the process of hiding data implementation by restricting access to public methods. It is wrapping up of data under a single unit. It is a protective cover that shields the code. It is also known as data hiding.
2. **Polymorphism –** Polymorphism is the ability of OOPs programming languages to differentiate between different entities with same name efficiently.
3. **Inheritance –** Inheritance is an important part of OOP. It is the mechanism by which one class is allowed to inherit the features of another class.
4. **Abstraction –** Abstraction is the property which ensures only essential details are displayed by the user. The trivial and non-important units are not displayed to the user.

The OOPs languages are C++, Java, Python etc.