


What is

O O P

 Facts4web



Object-oriented programming technique that **binds** related data and **functions** into an object and **encourages** reuse of these objects within the same and other **programs**.



Building Blocks of OOP

- **Classes** : are user-defined data types that act as the blueprint for individual objects, attributes and methods.
- **Objects** : are instances of a class created with specifically defined data.
- **Methods** : are functions that are defined inside a class that describe the behaviors of an object.
- **Attributes** : are defined in the class template and represent the state of an object. Objects will have data stored in the attributes fields and methods.



Four Principles of OOP

- **Inheritance** : Child classes inherit data and behaviors from parent class.
- **Encapsulation** : Containing information in an object, exposing only selected information.
- **Abstraction** : Only exposing high level public methods for accessing an object.
- **Polymorphism** : Many methods can do the same task.

