

# Object Oriented Programming

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# Object Oriented Programming

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- Object-oriented programming – As the name suggests uses 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.

# Features :

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- There are some basic concepts that act as the building blocks of OOPs i.e.
  - Class
  - Objects
  - Encapsulation
  - Abstraction
  - Polymorphism
  - Inheritance
  - Dynamic Binding
  - Message Passing

# Structured Programming vs. Object Oriented Programming

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## STRUCTURED PROGRAMMING

- Code is divided into modules and function
- Top-down approach
- Difficult to modify and manage
- More reusability of code
- Less flexibility and abstraction.
- Main function calls other functions.

## OOPS ORIENTED PROGRAMMING

- Code is divided into objects and classes
- Bottom-up approach
- Easy to modify and manage
- More reusability of code
- More flexibility and abstraction.
- Object communicate by passing messages.