

Basic question of an OOP Activity

Question:

What is the basic difference between functional programming and OOP? Why we should prefer OOP?

Answer:

Functional Programming: Focuses on using functions as the primary building blocks of software. Functions are treated as first-class citizens, and immutability (unchanging state) is emphasized.

Object-Oriented Programming: Focuses on organizing code into objects, which encapsulate data and behavior. Objects are instances of classes, and the emphasis is on encapsulation, inheritance, and polymorphism.

Reasons to Prefer OOP:

- OOP promotes modularity by encapsulating data and behavior into objects.
- Inheritance in OOP allows for the reuse of code through the creation of a hierarchy of classes.
- OOP supports encapsulation, which hides the internal details of objects, and abstraction, which allows the creation of simplified models.