

Short answer

Objective: Reinforce understanding of inheritance and encapsulation.

Instructions: Answer the following questions.

Solution

What is the difference between a superclass and a subclass?

A superclass is a class that is inherited by other classes, while a subclass is a class that inherits from a superclass. A subclass can extend or modify the functionality of the superclass.

Why is encapsulation important in object-oriented programming?

Encapsulation helps protect the internal state of an object from unintended modifications and ensures that the object's data can only be accessed or modified through well-defined methods, promoting security and maintainability.

How does method overriding work in inheritance?

Method overriding allows a subclass to provide a specific implementation of a method that is already defined in its superclass. This means the subclass can change the behavior of the inherited method.