22 Lecture - CS304

Important Subjective

1. How is inheritance implemented in C?

Answer: Inheritance in C is implemented using structures and function pointers.

What is the difference between a base class and a derived class?

Answer: A base class is a class from which other classes are derived, while a derived class is a class that inherits properties and methods from the base class.

How is a derived structure defined in C?

Answer: A derived structure in C is defined using the syntax "struct Derived : public Base {}".

What is the purpose of inheritance?

Answer: The purpose of inheritance is to achieve code reusability and simplify the creation of new classes with similar functionality to existing classes.

What is multiple inheritance?

Answer: Multiple inheritance is a type of inheritance in which a derived class can inherit from multiple base classes.

How do you call the constructor of the base class from the derived class constructor?

Answer: The constructor of the base class can be called from the derived class constructor using the "base" keyword.

What is hierarchical inheritance?

Answer: Hierarchical inheritance is a type of inheritance in which a new class is created that inherits from a base class, and then another class is created that inherits from the new class.

What are the benefits of inheritance?

Answer: The benefits of inheritance include code reusability, improved maintainability, and reduced coupling.

What is function overriding in inheritance?

Answer: Function overriding in inheritance is when a derived class defines a method with the same name and signature as a method in the base class, effectively replacing the method in the base class.

How does inheritance relate to polymorphism?

Answer: Inheritance and polymorphism are related in that polymorphism is achieved through inheritance, specifically through the use of function overriding.