

11 Lecture - CS403

Important Mcqs

1. **In object-oriented programming, what is inheritance?**

- a) A process of creating new objects
- b) A process of copying existing objects
- c) A process of deriving new classes from existing classes
- d) A process of extending the functionality of existing classes

Answer: c) A process of deriving new classes from existing classes

Which keyword is used to implement inheritance in Java?

- a) extends
- b) implements
- c) abstract
- d) final

Answer: a) extends

Inheritance enables:

- a) Code reuse
- b) Code duplication
- c) Code obfuscation
- d) Code obsolescence

Answer: a) Code reuse

Which of the following statements about inheritance is true?

- a) A derived class can access the private members of its base class.
- b) A derived class can modify the private members of its base class.
- c) A derived class cannot inherit the private members of its base class.
- d) A derived class can inherit the private members of its base class, but cannot access them.

Answer: c) A derived class cannot inherit the private members of its base class.

Which of the following is not a type of inheritance?

- a) Single inheritance
- b) Multiple inheritance
- c) Hierarchical inheritance
- d) Parallel inheritance

Answer: d) Parallel inheritance

What is the advantage of hierarchical inheritance?

- a) It allows multiple classes to inherit from a single base class.
- b) It allows a class to inherit from multiple base classes.
- c) It allows a class to inherit from itself.
- d) It allows a class to inherit from its own child class.

Answer: a) It allows multiple classes to inherit from a single base class.

Which of the following is not a method of implementing inheritance?

- a) Interfaces

- b) Abstract classes
- c) Composition
- d) Polymorphism

Answer: c) Composition

Which of the following is not a disadvantage of using inheritance?

- a) Tight coupling between classes
- b) Fragile base class problem
- c) Difficulty in understanding complex class hierarchies
- d) Code obfuscation

Answer: d) Code obfuscation

Which of the following statements about protected members is true?

- a) Protected members are accessible only within the same package.
- b) Protected members are accessible only within the same class.
- c) Protected members are accessible within the same package and in derived classes.
- d) Protected members are not accessible in any circumstance.

Answer: c) Protected members are accessible within the same package and in derived classes.

Which of the following is true about the final keyword in Java?

- a) It prevents a class from being inherited.
- b) It prevents a method from being overridden.
- c) It prevents a variable from being modified.
- d) All of the above.

Answer: d) All of the above.