

31 Lecture - CS304

Important Mcqs

1. **What is multiple inheritance in object-oriented programming?**

- A) Inheriting from multiple subclasses
- B) Inheriting from multiple parent classes
- C) Inheriting from multiple sibling classes
- D) Inheriting from multiple child classes

Answer: B

Which programming languages support multiple inheritance?

- A) Java
- B) Python
- C) C++
- D) All of the above

Answer: D

What is the main advantage of multiple inheritance?

- A) Code reusability
- B) Improved modularity
- C) Enhanced flexibility
- D) Reduced complexity

Answer: C

What is the potential downside of using multiple inheritance?

- A) Code duplication
- B) Ambiguity in method and attribute resolution
- C) Inability to access parent class attributes and methods
- D) Reduced code readability

Answer: B

What is the diamond problem in the context of multiple inheritance?

- A) A conflict that arises when two classes define the same attribute or method
- B) A conflict that arises when two classes inherit from the same parent class
- C) A conflict that arises when a class inherits from two or more classes that have a common ancestor
- D) A conflict that arises when a class has multiple methods with the same name and arguments

Answer: C

How can the diamond problem be resolved?

- A) By renaming conflicting methods and attributes
- B) By removing one of the conflicting parent classes
- C) By using virtual inheritance
- D) By using multiple inheritance only when necessary

Answer: C

What is the syntax for implementing multiple inheritance in Python?

- A) class ChildClass(ParentClass1, ParentClass2):

- B) class ChildClass(ParentClass1 and ParentClass2):
- C) class ChildClass(ParentClass1 or ParentClass2):
- D) class ChildClass(ParentClass1 ParentClass2):

Answer: A

What is the order of method resolution in multiple inheritance?

- A) Depth-first search
- B) Breadth-first search
- C) Random order
- D) Alphabetical order

Answer: A

What is the role of the super() function in multiple inheritance?

- A) It calls the constructor of the parent class
- B) It calls the method of the parent class
- C) It resolves conflicts in method and attribute names
- D) It prevents ambiguity in method resolution

Answer: B

What is the difference between multiple inheritance and interface inheritance?

- A) Multiple inheritance allows a class to inherit from multiple classes, while interface inheritance allows a class to inherit only method signatures.
- B) Multiple inheritance allows a class to inherit only method signatures, while interface inheritance allows a class to inherit from multiple classes.
- C) Multiple inheritance and interface inheritance are the same thing.
- D) Multiple inheritance and interface inheritance are not related concepts.

Answer: A