

C# Theoretical Questions - Answers

1. Because once you define any constructor, the compiler no longer generates the implicit default constructor automatically.
2. Method overloading improves readability by using the same method name for related operations and improves reusability by allowing different parameter lists without creating new method names.
3. Constructor chaining ensures that the base class is properly initialized before the derived class adds its own initialization logic.
4. `new` hides the base method, while `override` provides runtime polymorphism and replaces the base implementation.
5. `ToString()` is overridden to provide meaningful string representation of objects instead of the default type name.
6. Because an interface is a contract and cannot contain full object implementation to instantiate.
7. Default implementations allow adding new methods to interfaces without breaking existing implementations.
8. It enables polymorphism and loose coupling between code and implementations.
9. C# allows multiple interface implementation, overcoming single inheritance limitation.
10. Virtual method has implementation and can be overridden; abstract method has no implementation and must be overridden.