

## 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.