Core Java

9. Classes: Inheritance
Inheritance

• Specializing general classes into more specific ones
• Often known as interface (abstraction) and implementation (concrete)
• All classes in Java inherit from `java.lang.Object`
• It is possible to expose more methods than what you inherit from, not lesser
Syntax

[access-specifier] [other-specifier]
class classname [implements interfaceasename,] [extends classname]
{
  
}


Interface

- Interfaces are way to specify object behaviors
- The focus is on methods than variables
- Interfaces can not be instantiated directly
- They can be used to invoke underlying implementation
Rule of Inheritance

- A Superclass pointer may reference a Subclass object
- An Interface cannot have objects of its own, but can point to objects of implementing classes
- The functionality is limited to whatever functionality is exposed by the current object's type
- Methods may be overridden or not defined (abstract classes)
Demonstration

• Compile and Execute a few programs
Questions?