* **INHERITANCE IN JAVA:**
* Java supports single level inheritance.
* The keyword ‘extends’ is used to declare inheritance.
* All classes in java directly or indirectly extend to java.lang.Object. Otherwise the compiler will not compile it.
* ‘super’ keyword is used to access instance data and methods of the super class. 'super’ has to be the first command in the class. No other statements other than comments can precede it.
* All subclass constructors (default and parameterized) by default invoke the default constructor of the super class
* **Shadowing in JAVA:**
* Used if super class sub classes and their methods have variables with same name.
* Local data always gets priority.
* This keyword is used to access the same class instance data.
* Keyword super is used to access the instance data of super class.
* Incase of multi-level inheritance a method has to be made inorder to access data of super class of the super class.
* **Object Ref between sub and super class:**
* An object of a super class can be assigned an instance of its sub-class. -> POLYMORPHIC. But still the class A cannot access the methods of the B-class. This is called method slicing.

Overloading and Overriding:

* Overloading happens within a class and overriding happens between a sub and its super class.
* They happen when 2 or more methods have the same name but vary in number of parameters or different types of parameter.
* Return type nor Parameter Name plays any role in either Overloading or Overriding.