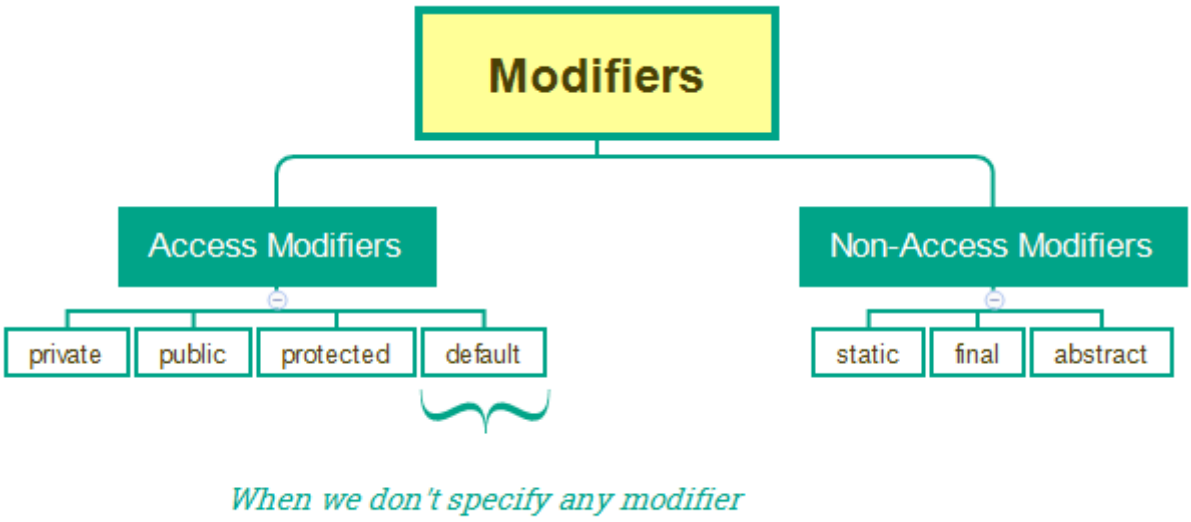
Overriding

When a method in the Child class (i.e. sub-class) is duplicate of a method in Parent class (i.e. super-class) , then the method in the sub-class is said to override the method in super-class.

- When we create an Object for Sub-class and call the overridden method, the method in the sub-class will be called - Demonstrate here
- Even though the name of the method in the sub-class has the same name as a method in super-class, if the type of parameters or number of parameters, then the method in the sub-class will overload the method in super-class instead of overriding
- Constructors cannot be overridden as the name of the constructor needs to be same as the name of the Class.

Modifiers

- Modifiers in Java can be categorized as below:



public Access Modifier

- Classes/variables/methods specified with 'public' access modifier can be accessed directly by the classes which are in the same package - Demonstrate
- Classes/variables/methods specified with 'public' access modifier can be accessed by the classes outside the package after importing the classes - Demonstrate

private Access Modifier

- Java classes cannot be specified with 'private' access modifier - Demonstrate
- variables/methods specified with 'private' access modifier can be accessed only with in the same class - Demonstrate

default Access Modifier

- When no modified is specified before classes/variables/methods, then we name it as default modifier - Demonstrate
- default means public to all the classes inside the same package and private to the classes which are outside the package - Demonstrate

protected Access Modifier

- protected means public to all the classes inside the same package and private to all the classes which are outside the package except child classes
- Java classes cannot be specified with 'protected' access modifier - Demonstrate
- While accessing the protected variables/methods outside the packages using sub-classes, we don't have to create an object to access them as they are inherited variables and methods - Demonstrate

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