

## **8. Access Modifiers**

1. Create a class with PRIVATE fields, private method and a main method. Print the fields in main method. Call the private method in main method.  
Create a sub class and try to access the private fields and methods from sub class.
2. Create a class with DEFAULT fields and methods. Access these fields and methods from any other class in the same package
3. Create a class with PROTECTED fields and methods. Access these fields and methods from any other class in the same package.  
Also, Access the PROTECTED fields and methods from child class located in a different package  
Access the PROTECTED fields and methods from any class in different package
4. Create a class with PUBLIC fields and methods.  
Access the public methods and fields from any class in the same package or different package.

## **9. Abstract Class**

1. Create an abstract class with abstract and non-abstract methods.
2. Create a sub class for an abstract class. Create an object in the child class for the abstract class and access the non-abstract methods
3. Create an instance for the child class in child class and call abstract methods
4. Create an instance for the child class in child class and call non-abstract methods

## **10. Interfaces**

1. Create an interface with only one method and implement it in a class. Call the method implemented.
2. Create an interface with two methods, but implement only one in a class. Call the method implemented.
3. Use Interface instances to call the implemented method in the implemented class
4. Create two interfaces with one method each. Implement these two interfaces in one class.
5. Create two interfaces with the same method (same signature) in both the interfaces. Implement these two interfaces in one class. Call the method.
6. Create an interface with a default method and implement it in a class. Do not provide implementation to the default method and call the method.
7. Create an interface and inherit it from the other interface.
8. Create a PUBLIC interface with fields and methods, fields should have values assigned. Implement this interface to some class and print the values of the interface fields and call the interface methods
9. Create a PRIVATE or PROTECTED interface and print the values as above scenario
10. Create an interface with private, public and protected fields.
11. Create an interface with static final variable