Inheritance assignment

1. Write 3 programs for single inheritance.
2. Write 3 programs for multilevel inheritance.
3. Write 3 programs for hierarchical inheritance
4. Create Class **Laptop** which has variables **noOfUSBPort**, **processorSpeed** of type int. Create **getter**, **setter** methods for the variables. In main method, 1> create Laptop object 2> set values of variables **noOfUSBPort, processorSpeed** using **setter** methods. 3> print variables **noOfUSBPort, processorSpeed** using **getter** methods.
5. Create class **IPLTeam** with method **play**. Create child classes of IPLTeam called as **CSK**, **RCB**. In main, call **play** from child class objects.
6. Create interface **Cake** with a method declared as **bake**. Create 2 classes **Strawberry**, **BlackForest** both implementing **Cake** interface.
7. Create interface **IceCream** with method **eat** and **Juice** with method **drink**. Create class **Mastani** which implements both interfaces.

Polymorphism - method overloading and over-riding, compile time and run time polymorphism

1. WAJP2 create a class Kid with method readBook() and another method readBook () with 2 parameters. The method readBook here is over-loaded (same method name but different parameters)

2. Create a class BigKid which extends Kid created above. Implement readBook() differently in BigKid class. Here the method readBook() has been over-ridden in the child class BigKid()

3. Create a class Teenager which extends Kid created above (#14). Implement readBook() differently in Teenager class. In main method, declare 2 variables k1, k2 of type Kid. Create objects of type BigKid and Teenager such that K1 should reference object of class BigKid and K2 should reference object of class Teenager. Call their respective readBook() methods. The output is different from both the method calls even if the variable type is the same i.e. Kid. This is compile time polymorphism example.