

## Problem-1: Inheritance and Object Reference Manipulation in Java.

Code:

```
1 package inheritance;
2
3
4 class Vehicle {
5     String brand = "Generic Vehicle";
6     int wheels = 4;
7
8     public void start() {
9         System.out.println(brand + " is starting... with " + wheels + " wheels" );
10    }
11
12
13 class Truck extends Vehicle {
14     Vehicle CtV = new Vehicle();
15
16     public void changeData(){
17         CtV.brand = "Mahindra" ;
18         CtV.wheels = 12;
19     }
20
21     public void displayDetails() {
22         System.out.println("Truck Brand " + CtV.brand);
23         System.out.println("Truck Wheel " + CtV.wheels);
24     }
25
26
27 public class Car extends Truck {
28     public static void main(String[] args) {
29         Car TtC = new Car();
30
31         TtC.start();
32
33         TtC.brand = "CHR" ;
34         TtC.wheels = 4 ;
35
36         System.out.println("Car Brand " + TtC.brand);
37         System.out.println("Car Wheel " + TtC.wheels);
38
39         TtC.changeData();
40         TtC.displayDetails();
41     }
42
43 }
44
```

Output - Lab21042025 (run) ×

```
run:
Generic Vehicle is starting... with 4 wheels
Car Brand CHR
Car Wheel 4
Truck Brand Mahindra
Truck Wheel 12
BUILD SUCCESSFUL (total time: 0 seconds)
```

## Problem-2: Accessing Members of Inner Classes in Java

Code:

```
1  package inheritance;
2
3  class OuterClass{
4      int a=1;
5
6      class InnerClass{
7          int b=2;
8      }
9  }
10
11 public class InnerOuter {
12     public static void main(String[] args) {
13         OuterClass ObO = new OuterClass();
14
15         OuterClass.InnerClass ObI= ObO.new InnerClass();
16
17         System.out.println("The sum is " + (ObI.b+ObO.a));
18     }
19 }
20
```

Find:  Previous Next Select Format Find Replace

inheritance.InnerOuter > main >

Output - Lab21042025 (run) x

run:  
The sum is 3  
BUILD SUCCESSFUL (total time: 0 seconds)