

ASSIGNMENT NO 05

```
public class Bicycle implements Vehicle
{
    int Bspeed;
    int Bgear;
    public void Changegear(int newgear)
    {
        Bgear=newgear;
    }

    public void Speedup(int increment)
    {
        Bspeed=Bspeed+increment;
    }

    public void Applybrack(int decrement)
    {
        Bspeed=Bspeed-decrement;
    }

    public void printstate()
    {
        System.out.println("BICYCLE ORIGINAL STATE:"+Bspeed+"
"+Bgear);
    }
}
```

```
public class Bike implements Vehicle
{
    int Bspeed;
    int Bigear;
    public void Changegear(int newgear)
    {
        Bigear=newgear;
    }

    public void Speedup(int increment)
    {
        Bspeed=Bspeed+increment;
    }

    public void Applybrack(int decrement)
    {
        Bspeed=Bspeed-decrement;
    }

    public void printstate()
    {
        System.out.println("BICYCLE ORIGINAL STATE:"+Bspeed+"
"+Bigear);
    }
}
```

```
public class Car implements Vehicle
{
    int Cspeed;
    int Cgear;
    public void Changegear(int newgear)
    {
        Cgear=newgear;
    }

    public void Speedup(int increment)
    {
        Cspeed=Cspeed+increment;
    }

    public void Applybrack(int decrement)
    {
        Cspeed=Cspeed-decrement;
    }

    public void printstate()
    {
        System.out.println("BICYCLE ORIGINAL STATE:"+Cspeed+"
"+Cgear);
    }
}
```

```
public class Intdemo
{
    public static void main(String args[])
    {
        Bicycle b=new Bicycle();
        b.Changegear(2);
        b.Speedup(20);
        b.Applybrack(15);
        System.out.println("BICYCLE PRESENT STATE IS :");
        b.printstate();

        Bike b1=new Bike();
        b1.Changegear(3);
        b1.Speedup(50);
        b1.Applybrack(40);
        System.out.println("BIKE PRESENT STATE IS :");
        b1.printstate();

        Car c=new Car();
        c.Changegear(4);
        c.Speedup(80);
        c.Applybrack(60);
        System.out.println("CAR PRESENT STATE IS :");
        c.printstate();

    }
}
```

```
import java.util.*;
public interface Vehicle
{
    void Changegear(int speed);
    void Speedup(int gear);
    void Applybrack(int brack);
}
```