interface Vehicles{

public void Speed\_Up(int a);

public void Gear\_Change(int b);

public void Apply\_Break();

}

public class Bicycle implements Vehicles{

private int speed;

int gear;

public int getspeed(){

return this.speed;

}

public void setspeed(int speed){

this.speed = speed;

}

public void Speed\_Up(int increment){

speed = speed+increment;

}

public void Gear\_Change(int change){

gear = change;

}

public void Apply\_Break(){

speed=speed-speed;

}

public void Display(){

System.out.println("\n\nBicycle Status");

System.out.println("Speed of the Bicycle is = " +speed+"km/hr");

System.out.println("Gear of the Bicycle is = "+gear);

}

}

public class Car implements Vehicles{

private int speed;

int gear;

public int getspeed(){

return this.speed;

}

public void setspeed(int speed){

this.speed = speed;

}

public void Speed\_Up(int increment){

speed = speed+increment;

}

public void Gear\_Change(int change){

gear = change;

}

public void Apply\_Break(){

speed=speed-speed;

}

public void Display(){

System.out.println("\n\nCar Status");

System.out.println("Speed of the Car is = "+speed+"km/hr");

System.out.println("Gear of the Car is = "+gear);

}

}

public class Bike implements Vehicles{

private int speed;

int gear;

public void setspeed(int speed){

this.speed = speed;

}

public int getspeed(){

return this.speed;

}

public void Speed\_Up(int increment){

speed=speed+increment;

}

public void Gear\_Change(int change){

gear = change;

}

public void Apply\_Break(){

speed=speed-speed;

}

public void Display(){

System.out.println("\n\nBike Status");

System.out.println("Speed of the Bike is = "+speed+"km/hr");

System.out.println("Gear of the Bike is = "+gear);

}

}

public class Test{

public static void main(String[] args){

Bicycle obj1 = new Bicycle();

obj1.setspeed(20);

obj1.getspeed();

obj1.Speed\_Up(8);

obj1.Gear\_Change(4);

obj1.Display();

obj1.Apply\_Break();

obj1.Display();

Car obj2 = new Car();

obj2.setspeed(78);

obj2.getspeed();

obj2.Speed\_Up(7);

obj2.Gear\_Change(3)

obj2.Display();

obj2.Apply\_Break();

obj2.Display();

Bike obj3 = new Bike();

obj3.setspeed(40);

obj3.getspeed();

obj3.Speed\_Up(3);

obj3.Gear\_Change(2);

obj3.Display();

obj3.Apply\_Break();

obj3.Display();

}

}

Output

Bicycle Status

Speed of the Bicycle is = 28km/hr

Gear of the Bicycle is = 4

Bicycle Status

Speed of the Bicycle is = 0km/hr

Gear of the Bicycle is = 4

Car Status

Speed of the Car is = 85km/hr

Gear of the Car is = 3

Car Status

Speed of the Car is = 0km/hr

Gear of the Car is = 3

Bike Status

Speed of the Bike is = 43km/hr

Gear of the Bike is = 2

Bike Status

Speed of the Bike is = 0km/hr

Gear of the Bike is = 2