**LAB_ANP_C6339_CLASSES_ StudenID:AF0339439**

**Assignment-1**. Assignment -1. ● Write a Java program to create a class called Vehicle with a method called drive(). ● Vehicle should have attributes such as make (String), model (String) , year (int) and maximumSpeed (int). ● Create a constructor in Vehicle with all fields as constructor parameters. ● Create a subclass called Car and override constructor. Call super(). ● Write a function that overrides the drive() method to print (make + " " + model + " Car is driving". ) ● Also create another subclass Bike extending the vehicle class. ● Override the drive() method to print (make + " " + model + " Bike is driving". ) ● Instantiate both Bike and Car class. Print their attributes.

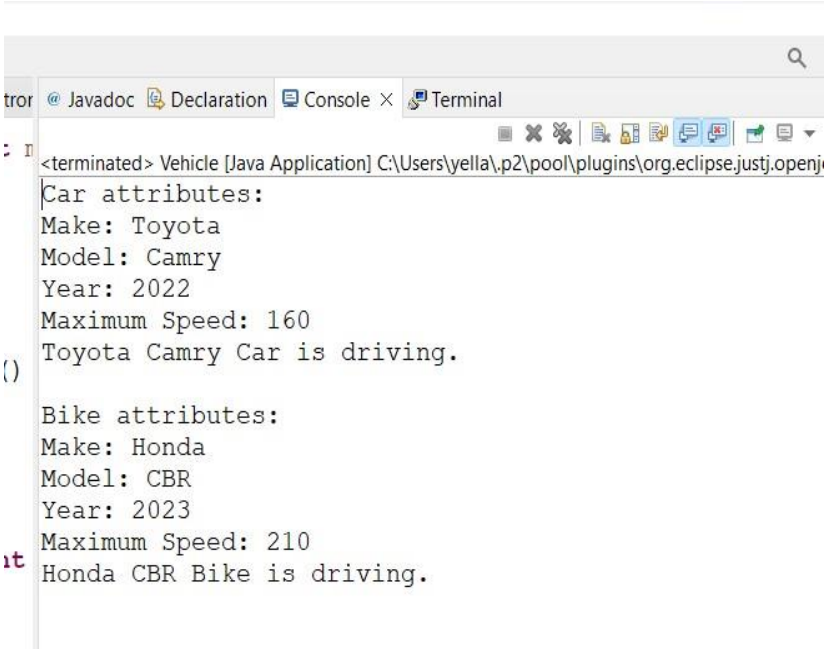
**Program:**

```
package Oops;
class Vehicles
{
    private String make;
    private String model;
    private int year;
    private int maximumSpeed;

    public Vehicles (String make, String model, int year, int
maximumSpeed)  //constructor
    {
        this.make = make;
        this.model = model;
        this.year = year;
        this.maximumSpeed = maximumSpeed;
    }

    public void drive() {
        System.out.println(make + " " + model + " is driving.");
    }

    public String getMake() {
        return make;
    }

    public String getModel() {
        return model;
    }

    public int getYear() {
        return year;
    }

    public int getMaximumSpeed() {
        return maximumSpeed;
```

```
    }
}

class Car extends Vehicles
{
    public Car(String make, String model, int year, int
maximumSpeed)
    {
        super(make, model, year, maximumSpeed);
    }

    @Override
    public void drive() {
        System.out.println(getMake() +  " " + getModel() + " Car is
driving.");
    }
}

class Bike extends Vehicles
{
    public Bike(String make, String model, int year, int
maximumSpeed) {
        super(make, model, year, maximumSpeed);
    }

    @Override
    public void drive() {
        System.out.println(getMake() + " " + getModel() + " Bike is
driving.");
    }

}
 public class Vehicle
 {
    public static void main(String[] args)
    {
        Car car = new Car("Toyota", "Camry", 2022, 160);
        Bike bike = new Bike("Honda", "CBR", 2023, 210);

        System.out.println("Car attributes:");
        System.out.println("Make: " + car.getMake());
        System.out.println("Model: " + car.getModel());
        System.out.println("Year: " + car.getYear());
        System.out.println("Maximum Speed: " +
car.getMaximumSpeed());
        car.drive();

        System.out.println("\nBike attributes:");
        System.out.println("Make: " + bike.getMake());
        System.out.println("Model: " + bike.getModel());
        System.out.println("Year: " + bike.getYear());
        System.out.println("Maximum Speed: " +
bike.getMaximumSpeed());

        bike.drive();
```

```
    }
}
```

**Output:**


Javadoc
Declaration
Console
Terminal
<terminated> Vehicle [Java Application] C:\Users\yella\.p2\pool\plugins\org.eclipse.justj.openj
Car attributes:
Make: Toyota
Model: Camry
Year: 2022
Maximum Speed: 160
Toyota Camry Car is driving.
Bike attributes:
Make: Honda
Model: CBR
Year: 2023
Maximum Speed: 210
Honda CBR Bike is driving.