

- wheelCount
- isPrivateBus : flag bus is private or public
- Every class have method `identifyMySelf()` that **overrides** from `Vehicle` to print out like demo on the next slide

```

public class MainClass {
    public static void main(String[] args) {
        Vehicle pedalBike = new Bike("Pedal Bike", Boolean.FALSE, 2);
        pedalBike.identifyMySelf();
        System.out.println();

        Vehicle motorBike = new Bike("Motor Bike", Boolean.TRUE, 2);
        motorBike.identifyMySelf();
        System.out.println();

        Vehicle cityCar = new Car("City Car", Boolean.TRUE, 4, "4 Cylinder");
        cityCar.identifyMySelf();
        System.out.println();

        Vehicle sportCar = new Car("Sport Car", Boolean.TRUE, 4, "12-V Cylinder");
        sportCar.identifyMySelf();
        System.out.println();

        Vehicle transBus = new Bus("Public Bus", Boolean.TRUE, 6, Boolean.FALSE);
        transBus.identifyMySelf();
        System.out.println();

        Vehicle schoolBus = new Bus("Private Bus", Boolean.TRUE, 6, Boolean.TRUE);
        schoolBus.identifyMySelf();
        System.out.println();
    }
}

class Vehicle {
    protected String name;
    protected boolean isUseEngine;

    public Vehicle(String name, boolean isUseEngine) {
        this.name = name;
        this.isUseEngine = isUseEngine;
    }

    public void identifyMySelf() {
        System.out.println("Hi I'm Parent of All Vehicles, My name is " + this.name + ", My Engine Status is " + (this.isUseEngine ? "with engine" : "no engine") + "");
    }
}

class Bike extends Vehicle{
    protected Integer wheelCount;

    public Bike(String name, boolean isUseEngine, Integer wheelCount) {
        super(name, isUseEngine);
        this.wheelCount = wheelCount;
    }

    @Override
    public void identifyMySelf() {
        System.out.println("Hi I'm Bike , My name is " + this.name + ", My Engine Status is "
            + (this.isUseEngine ? "with engine" : "no engine") + ", I have " + this.wheelCount + " Wheel(s)");
    }
}

class Bus extends Vehicle {
    protected Integer wheelCount;
    protected boolean isPrivateBus;

    public Bus(String name, boolean isUseEngine, Integer wheelCount, boolean isPrivateBus) {
        super(name, isUseEngine);
        this.wheelCount = wheelCount;
        this.isPrivateBus = isPrivateBus;
    }

    @Override
    public void identifyMySelf() {
        System.out.println("Hi I'm Bus [" + (this.isPrivateBus ? "Private Bus" : "Public Bus") + "], My name is "
            + this.name + ", My Engine Status is " + (this.isUseEngine ? "with engine" : "no engine")
            + ", I have " + this.wheelCount + " Wheel(s)");
    }
}

class Car extends Vehicle {
    protected Integer wheelCount;
    protected String engineType;

    public Car(String name, boolean isUseEngine, Integer wheelCount, String engineType) {
        super(name, isUseEngine);
        this.wheelCount = wheelCount;
        this.engineType = engineType;
    }

    @Override
    public void identifyMySelf() {
        System.out.println("Hi I'm Car , My name is " + this.name + ", My Engine Status is "
            + (this.isUseEngine ? "with engine" : "no engine") + ", I have " + this.wheelCount
            + " Wheel(s), My Engine Type is " + this.engineType + ", I have " + this.wheelCount);
    }
}

```