

AbsTraction

```
interface Drivable {
    void drive();
}
```

```
interface Engine {
    void startEngine();
    void stopEngine();
}
```

```
abstract class Vehicle {
    String brand;
    public Vehicle (String brand) {
        this.brand = brand;
    }
}
```

```
abstract void fuelType();
public void showBrand() {
    System.out.println ("Vehicle Brand: " + brand);
}
```

```
class Car extends Vehicle implements Drivable, Engine {
    public Car (String brand) {
        super (brand);
    }
    @Override
    void fuelType() {
        System.out.println ("Car uses petrol.");
    }
}
```

```
@Override
public void drive() {
    System.out.println ("Car is driving on the road");
}
```

@override

```
public void startEngine() {  
    System.out.println("Car engine started.");
```

@override

```
public void stopEngine() {  
    System.out.println("Car engine stopped.");  
}
```

Class ElectricBike extends Vehicle implements

Driveable, Engine{

```
public ElectricBike(String brand) {  
    super(brand); }
```

@override

```
public static void drive() {
```

```
    System.out.println("Electric bike is gliding.");
```

@override

~~public void~~ fuelType() {

```
    System.out.println("Electric bike uses battery.");
```

Class Boat extends Vehicle implements

Driveable, Engine{

```
public Boat(String brand) {  
    super(brand); }
```

@override

```
public void drive() {
```

```
    System.out.println("Boat is sailing.");
```

```
void fuelType() {  
    System.out.println("Boat uses diesel.");}  
public class Abstractions  
public static void main(String args[]) {  
    Vehicle car = new car("Toyota");  
    car.showBrand();  
    ((Drivable) car).drive();  
    car.fuelType();  
    System.out.println();  
    Vehicle ebike = new ElectricBike("Tesla");  
    ebike.showBrand();  
    ((Drivable) ebike).startEngine();  
    ebike.fuelType();  
    System.out.println();  
    Vehicle boat = new Boat("Yamaha");  
    boat.showBrand();  
    ((Drivable) boat).drive();  
    boat.fuelType();  
}
```