

Abstraction, Interface, Inheritance

```
import java.io. PrintStream;

interface Engine {
    void startEngine();
    void stopEngine();
    PrintStream o = System.out;
}
```

```
abstract class Vehicle {
    String brand;
    int year;

    public Vehicle(String brand, int year) {
        this.brand = brand;
        this.year = year;
    }
}
```

```
    abstract void drive();
    public void displayInfo() {
        sys Engine.o.println("Brand: " + Brand
            + ", Year: " + year);
    }
}
```

```
class Car extends Vehicle implement Engine {
    public Car(String brand, int year) {
        super(brand, year);
    }
}
```

@ Override

```
public void stopEngine() {
    o.println("Car Engine Stop.");
}
```

@ Override

```
void drive() {
    o.println("Driving a car.");
}
```

```
} }
```

```
class Bike extends Vehicle implements Engine {
    public Bike(String Brand, int year) {
        super(Brand, year);
    }
}
```

@ Override

```
public void startEngine() {
    o.println("Bike engine start.");
}
```

@ Override

```
public void stopEngine() {
    o.println("Bike Engine stop.");
}
```

```
public class TestVehicle {
```

```
    public static void main(String[] args) {
```

```
        Vehicle car = new Car("Toyota", 2022)
```

```
        car.displayInfo();
```

```
        ((Engine) car).stopEngine();
```

```
        car.drive();
```

```
        ((Engine) car).stopEngine();
    }
}
```

```
Engine. 0. println();
```

```
Vehicle bike = new Bike("Yamaha" 2023);
```

```
bike.displayInfo();
```

```
((Engine) bike).startEngine();
```

```
bike.drive();
```

```
((Engine) bike).stopEngine();
```

```
}
```

```
}
```