## 1. CreateAuto and UpdateAuto

Use CreateAuto and UpdateAuto to create and modifies the same automobile. I can use them to change like price, name of optionset, and so on.

**private** **static** **void** test\_Unit2\_changePrice\_updateOptName() {

CreateAuto a1 = **new** BuildAuto();

UpdateAuto a2 = **new** BuildAuto();

// modify the name of the optionset "Color" to be "ColorOfAuto"

a2.updateOptionSetName("Focus Wagon ZTW", "Color", "ColorOfAuto");

// modify the price of color "Liquid Grey Clearcoat Metallic"

// to be 100.45.

a2.updateOptionPrice("Focus Wagon ZTW", "ColorOfAuto",

"Liquid Grey Clearcoat Metallic", (**float**) 100.45);

// modify the name of the optionset "Brakes/Traction Control" to be

// "Brakes/Traction Control"

a2.updateOptionSetName("Audi A6", "Brakes/Traction Control",

"Brakes or Traction Control");

// modify the price of color "Liquid Grey Clearcoat Metallic"

// to be 100.45.

a2.updateOptionPrice("Audi A6", "Brakes or Traction Control",

"ABS", (**float**) 450);

**Test result:**

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Read 2 files:testFile1 and testFile2:

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Print the first model:

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Model name:Focus Wagon ZTW

Base Price:18445.000000

Option number:5

OptionSet name: Color

Option number: 10

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Fort Knox Gold Clearcoat Metallic:0.000000

Liquid Grey Clearcoat Metallic:0.000000

Infra-Red Clearcoat:0.000000

Grabber Green Clearcoat Metallic:0.000000

Sangria Red Clearcoat Metallic:0.000000

French Blue Clearcoat Metallic:0.000000

Twilight Blue Clearcoat Metallic:0.000000

CD Silver Clearcoat Metallic:0.000000

Pitch Black Clearcoat:0.000000

Cloud 9 White Clearcoat:0.000000

OptionSet name: Transmission

Option number: 2

==============================

automatic:0.000000

manual:-815.000000

OptionSet name: Brakes/Traction Control

Option number: 3

==============================

Standard:0.000000

ABS:400.000000

ABS with Advance Trac:1625.000000

OptionSet name: Side Impact Air Bags

Option number: 2

==============================

present:350.000000

not present:0.000000

OptionSet name: Power Moonroof

Option number: 2

==============================

present:595.000000

not present:0.000000

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Print the second model:

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Model name:Audi A6

Base Price:38445.000000

Option number:5

OptionSet name: Color

Option number: 11

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Fort Knox Gold Clearcoat Metallic:0.000000

Liquid Grey Clearcoat Metallic:0.000000

Infra-Red Clearcoat:0.000000

Grabber Green Clearcoat Metallic:0.000000

Sangria Red Clearcoat Metallic:0.000000

French Blue Clearcoat Metallic:0.000000

Twilight Blue Clearcoat Metallic:0.000000

CD Silver Clearcoat Metallic:0.000000

Pitch Black Clearcoat:0.000000

Cloud 9 White Clearcoat:0.000000

Red:0.000000

OptionSet name: Transmission

Option number: 2

==============================

automatic:0.000000

manual:-815.000000

OptionSet name: Brakes/Traction Control

Option number: 3

==============================

Standard:0.000000

ABS:400.000000

ABS with Advance Trac:1625.000000

OptionSet name: Side Impact Air Bags

Option number: 2

==============================

present:350.000000

not present:0.000000

OptionSet name: Power Moonroof

Option number: 2

==============================

present:595.000000

not present:0.000000

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After modify:

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Print the first model:

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Model name:Focus Wagon ZTW

Base Price:18445.000000

Option number:5

OptionSet name: ColorOfAuto

Option number: 10

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Fort Knox Gold Clearcoat Metallic:0.000000

Liquid Grey Clearcoat Metallic:100.449997

Infra-Red Clearcoat:0.000000

Grabber Green Clearcoat Metallic:0.000000

Sangria Red Clearcoat Metallic:0.000000

French Blue Clearcoat Metallic:0.000000

Twilight Blue Clearcoat Metallic:0.000000

CD Silver Clearcoat Metallic:0.000000

Pitch Black Clearcoat:0.000000

Cloud 9 White Clearcoat:0.000000

OptionSet name: Transmission

Option number: 2

==============================

automatic:0.000000

manual:-815.000000

OptionSet name: Brakes/Traction Control

Option number: 3

==============================

Standard:0.000000

ABS:400.000000

ABS with Advance Trac:1625.000000

OptionSet name: Side Impact Air Bags

Option number: 2

==============================

present:350.000000

not present:0.000000

OptionSet name: Power Moonroof

Option number: 2

==============================

present:595.000000

not present:0.000000

--------------

Print the second model:

---------------

Model name:Audi A6

Base Price:38445.000000

Option number:5

OptionSet name: Color

Option number: 11

==============================

Fort Knox Gold Clearcoat Metallic:0.000000

Liquid Grey Clearcoat Metallic:0.000000

Infra-Red Clearcoat:0.000000

Grabber Green Clearcoat Metallic:0.000000

Sangria Red Clearcoat Metallic:0.000000

French Blue Clearcoat Metallic:0.000000

Twilight Blue Clearcoat Metallic:0.000000

CD Silver Clearcoat Metallic:0.000000

Pitch Black Clearcoat:0.000000

Cloud 9 White Clearcoat:0.000000

Red:0.000000

OptionSet name: Transmission

Option number: 2

==============================

automatic:0.000000

manual:-815.000000

OptionSet name: Brakes or Traction Control

Option number: 3

==============================

Standard:0.000000

ABS:450.000000

ABS with Advance Trac:1625.000000

OptionSet name: Side Impact Air Bags

Option number: 2

==============================

present:350.000000

not present:0.000000

OptionSet name: Power Moonroof

Option number: 2

==============================

present:595.000000

not present:0.000000

## 2. Use errno to provide different fixing solutions

The different exceptions are identifiable by errno and use this errno to provide different fixing solutions.

FILE NAME: UserExceptions.java

**public** String fixProblemReadFromConsole()

{

**if** (errorNumber == 0) {

// input the new file name from the console

String filename;

Scanner sc = **new** Scanner(System.*in*);

System.*out*.println("Please input the right file name:");

filename = sc.nextLine();

System.*out*.println("Got here --> fixProblemReadFromConsole");

//sc.close();

**return** filename;

} **else** {

**return** **null**;

}

}