STUDENT ID = *31213294*; NAME = *Kapish Kuchroo;* UNIT = *FIT9131 ASSIGNMENT 2*

TEST STRATEGY FOR CAR CLASS

Test 1: Test the default constructor

Test 2: Test parametrised constructor

1. Test with all valid inputs
2. Test with all invalid inputs

Test 3: Test all accessor methods

1. Test the accessor method with default constructor
2. Test the accessor method with parametrised constructor

Test 4: Test all mutator methods

1. Test the method with valid values
2. Test the method with invalid values

Test 5: Test the print method

Test 6: Test the display method

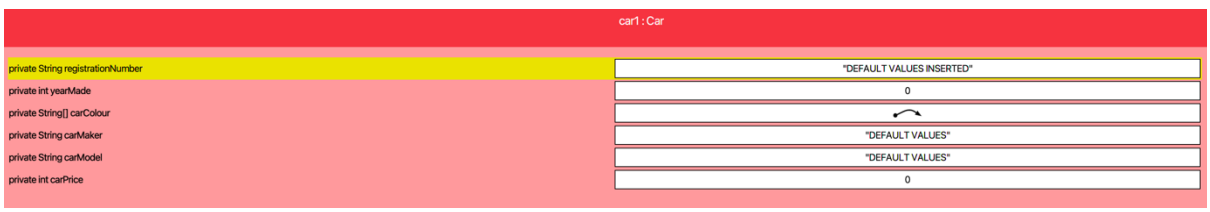
Test 1: Test the default constructor

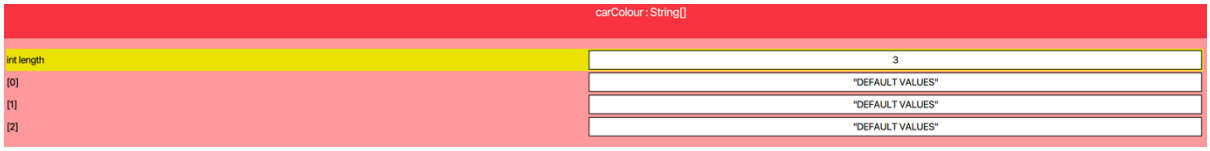
- Creating a Car object with default constructor

Test Data: No input

Expected Results:
registrationNumber = "DEFAULT VALUES INSERTED";
yearMade = 000;
carColour[0] = "DEFAULT VALUES";
carColour[1] = "DEFAULT VALUES";
carColour[2] = "DEFAULT VALUES";
carMaker = "DEFAULT VALUES";
carModel = "DEFAULT VALUES";
carPrice = 000;

Actual Results:





Test 2: Test parametrised constructor

- Creating a Car object with parametrised constructor

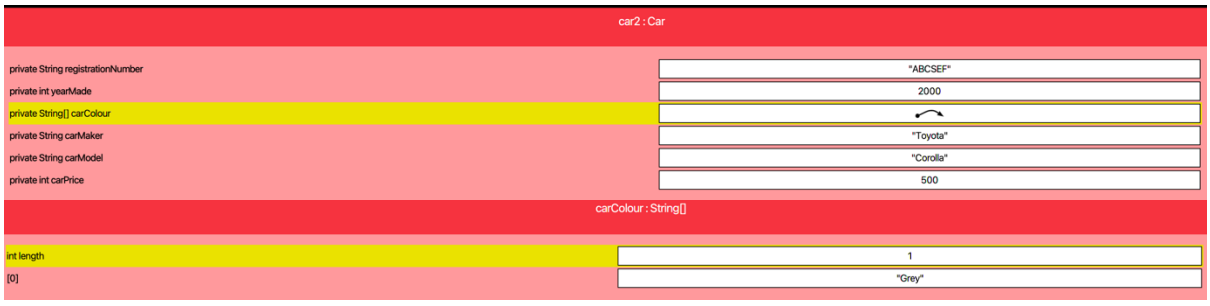
Test Data: Positive input

registrationNumber = "ABCSEF";
yearMade = 2000;
carColour[0] = "Grey";
carMaker = "Toyota";
carModel = "Corolla";
carPrice = 500;

Expected Results:

registrationNumber = "ABCSEF";
yearMade = 2000;
carColour[0] = "Grey";
carMaker = "Toyota";
carModel = "Corolla";
carPrice = 500;

Actual Results:



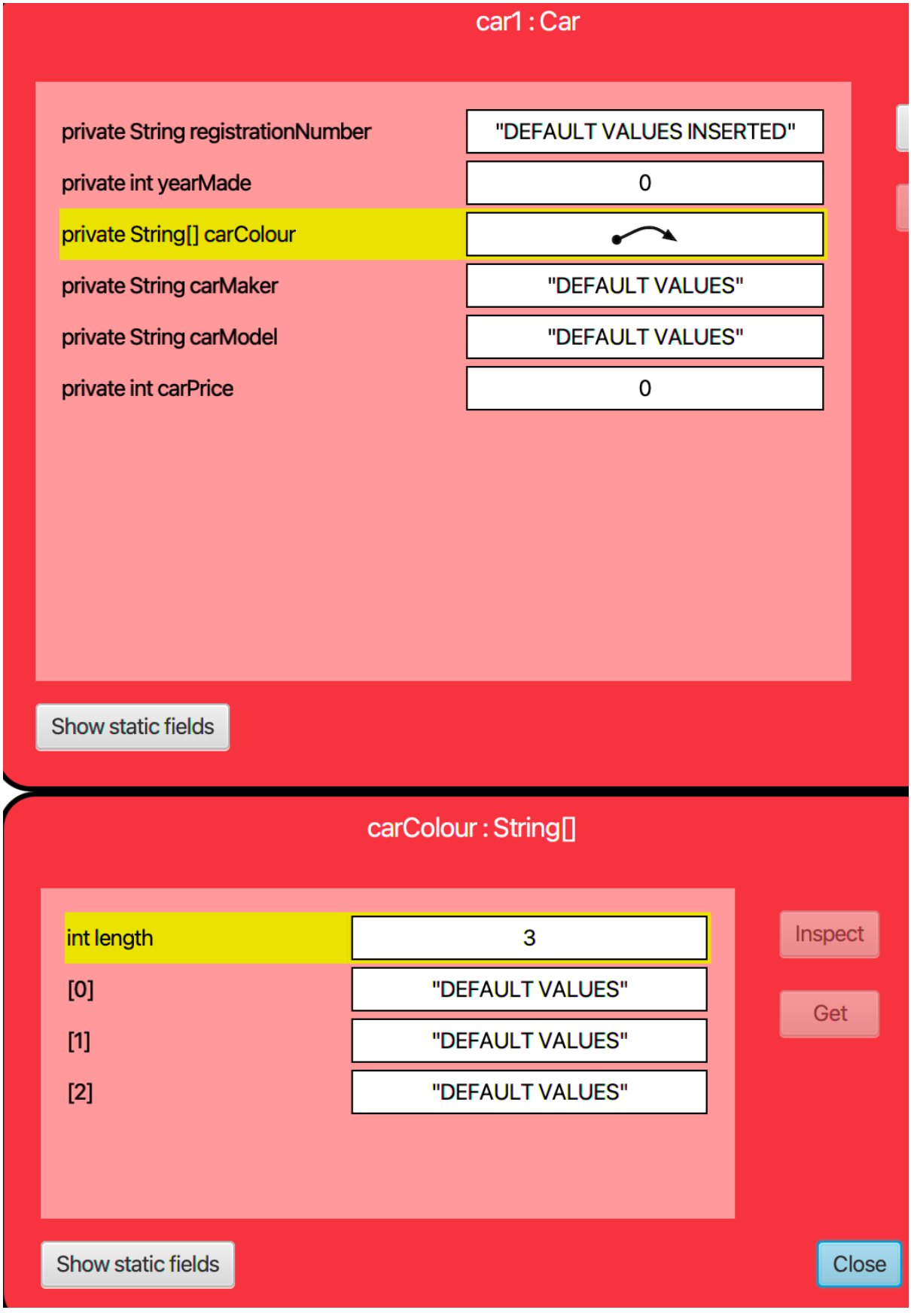
Test Data: Negative input

registrationNumber = "";
yearMade = 000
carColour[0] = "Grey";
carMaker = "Toyota";
carModel = "Corolla";
carPrice = 500;

Expected Results:

registrationNumber = "DEFAULT VALUES INSERTED";
yearMade = 0;
carColour[0] = "DEFAULT VALUES";
carColour[1] = "DEFAULT VALUES";
carColour[2] = "DEFAULT VALUES";
carMaker = "DEFAULT VALUES";
carModel = "DEFAULT VALUES";
carPrice = 0;
System.out.println(“Validation Failed!! Please check the following: registrationNumber, yearMade, carColour, carMaker, carModel, carPrice”);

Actual Results:


car1 : Car
private String registrationNumber
"DEFAULT VALUES INSERTED"
private int yearMade
0
private String[] carColour
private String carMaker
"DEFAULT VALUES"
private String carModel
"DEFAULT VALUES"
private int carPrice
0
Show static fields
carColour : String[]
int length
3
[0]
"DEFAULT VALUES"
[1]
"DEFAULT VALUES"
[2]
"DEFAULT VALUES"
Inspect
Get
Show static fields
Close

Test 3: Test all accessor methods

1. **Test the accessor method with default constructor**

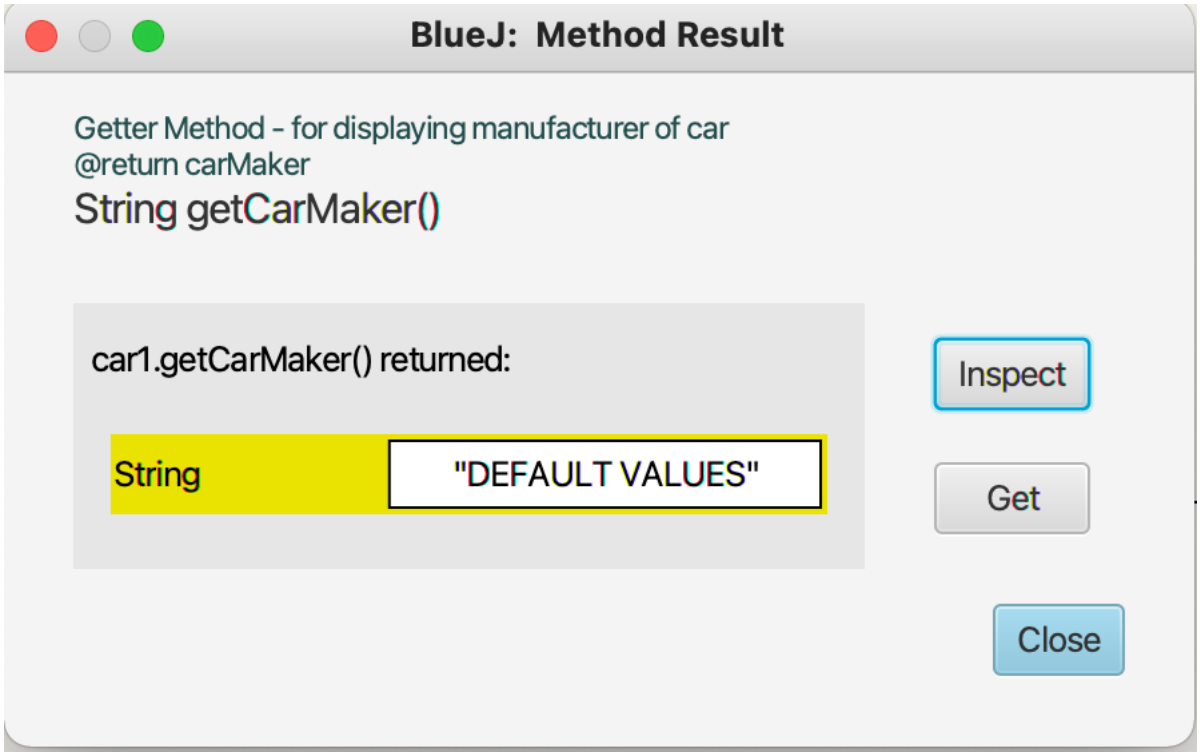
- ***getCarMaker()***

  Test Data: None

  Expected Results:

  "DEFAULT VALUES"

  Actual Results



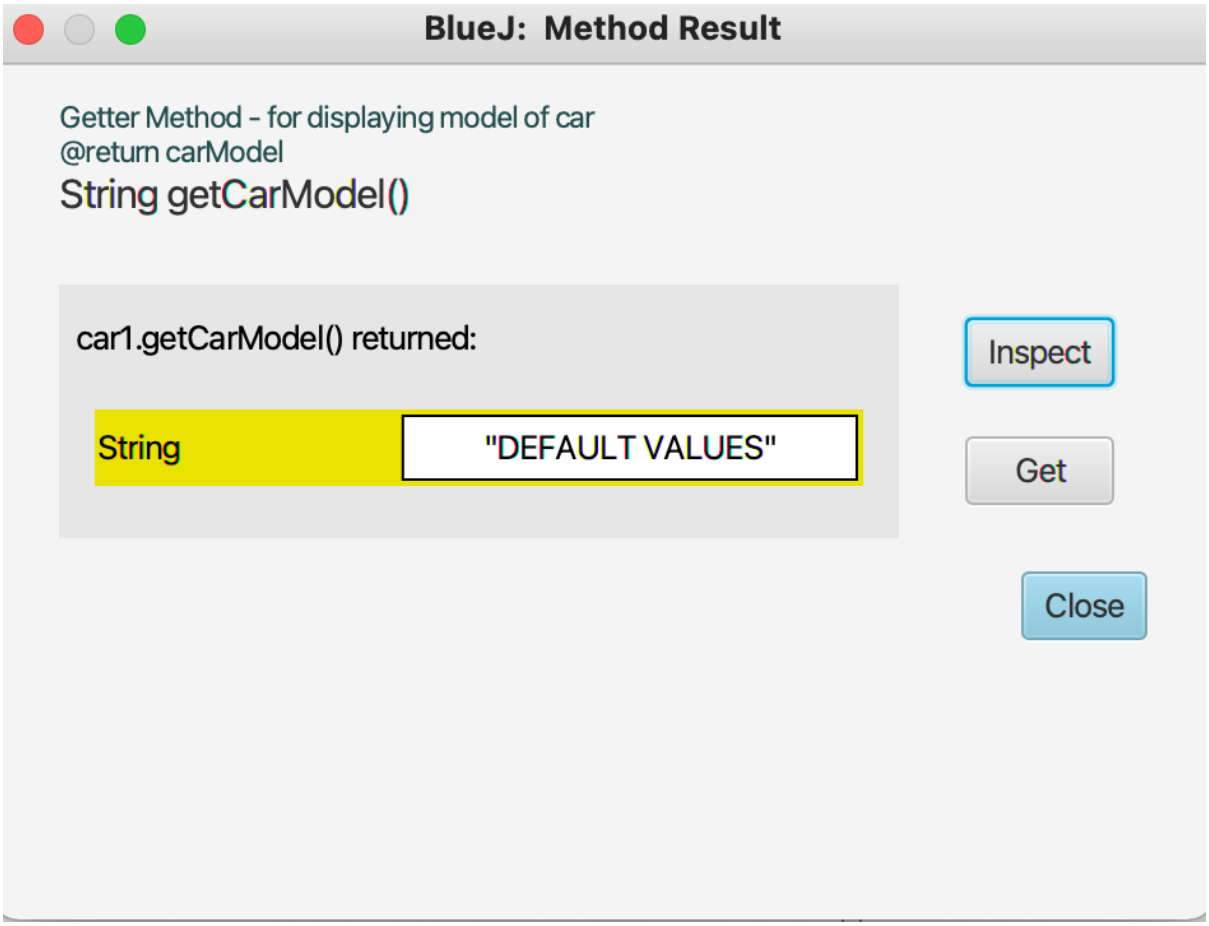
- ***getCarModel()***

  Test Data: None

  Expected Results

  "DEFAULT VALUES"

  Actual Results



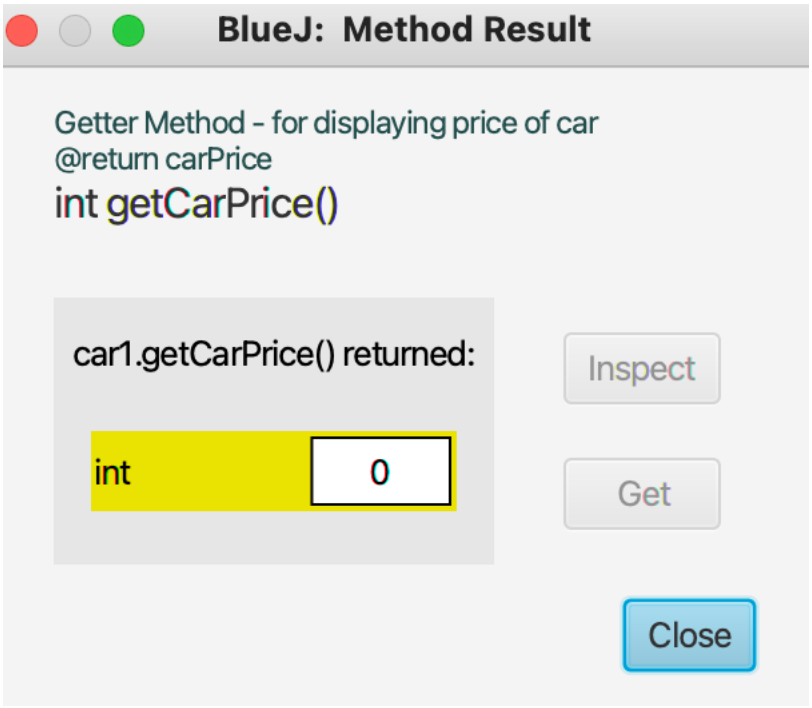
- ***getCarPrice()***

  Test Data: None

  Expected Results

  0

  Actual Results



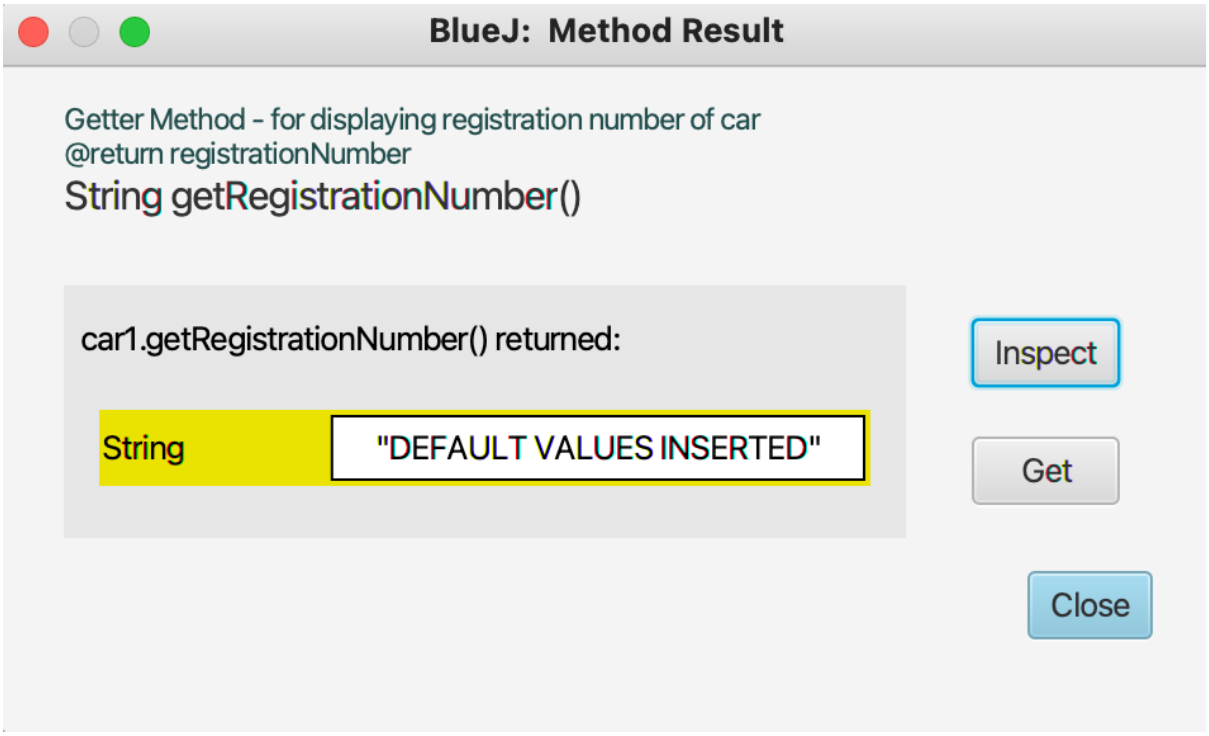
- ***getRegistrationNumber()***

  Test Data: None

  Expected Results

  "DEFAULT VALUES INSERTED"

  Actual Results



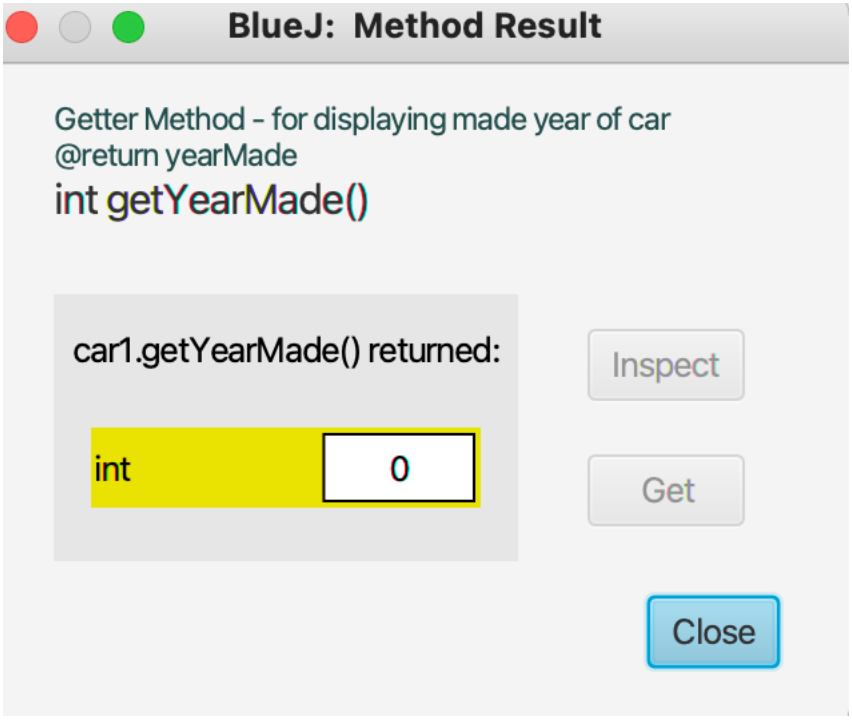
- ***getYearMade()***

  Test Data: None

  Expected Results

  0

  Actual Results



2. Test the accessor method with parametrised constructor

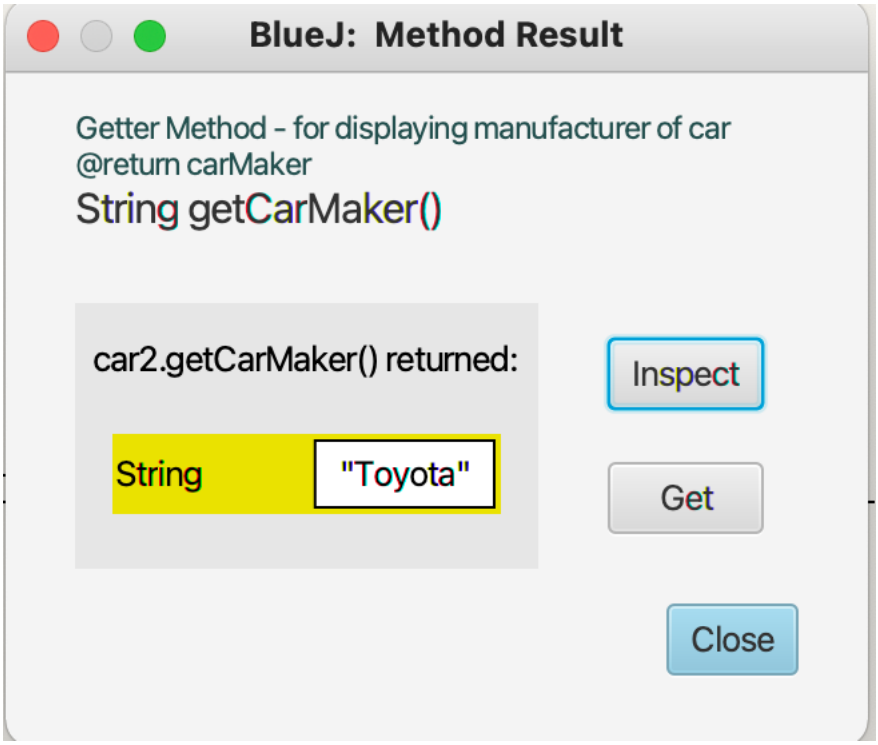
- ***getCarMaker()***

  Test Data: “Toyota”

  Expected Results:

  “Toyota”

  Actual Results



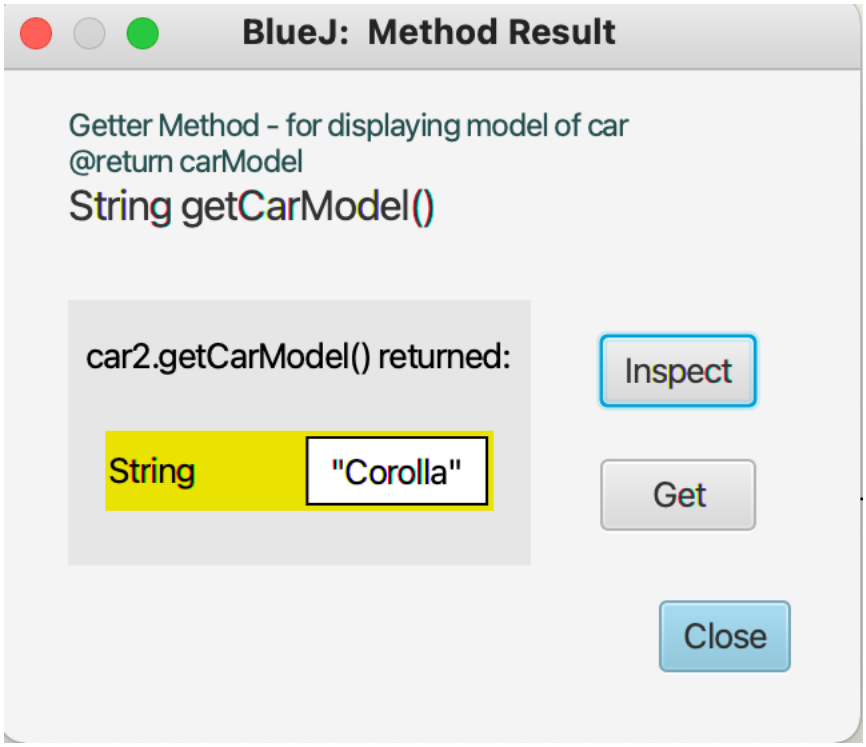
- ***getCarModel()***

  Test Data: “Corolla”

  Expected Results

  “Corolla”

  Actual Results



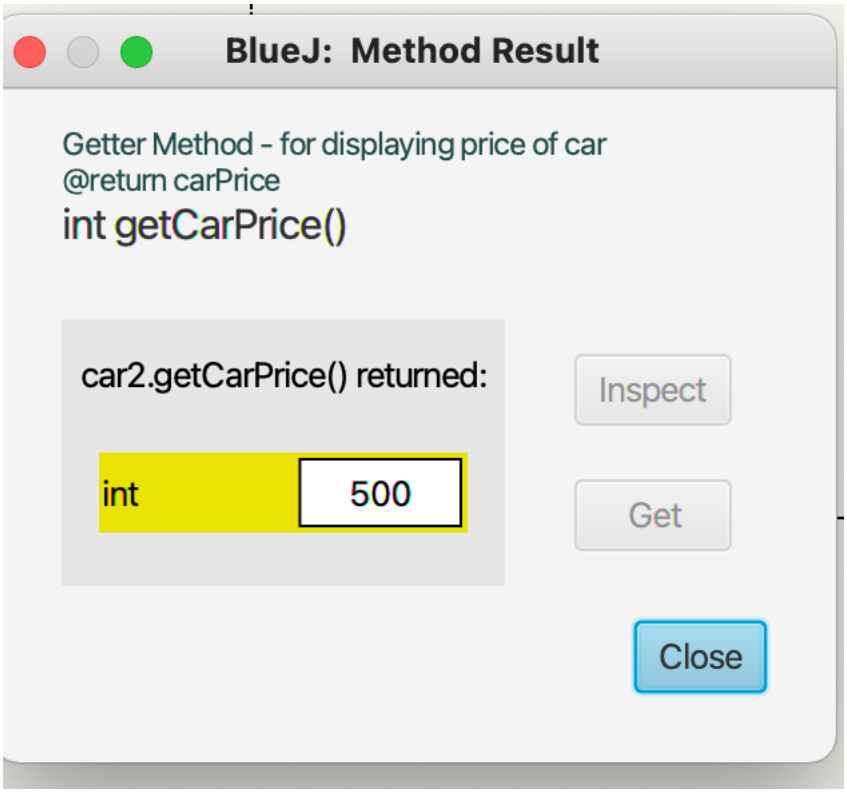
- ***getCarPrice()***

  Test Data: 500

  Expected Results

  500

  Actual Results



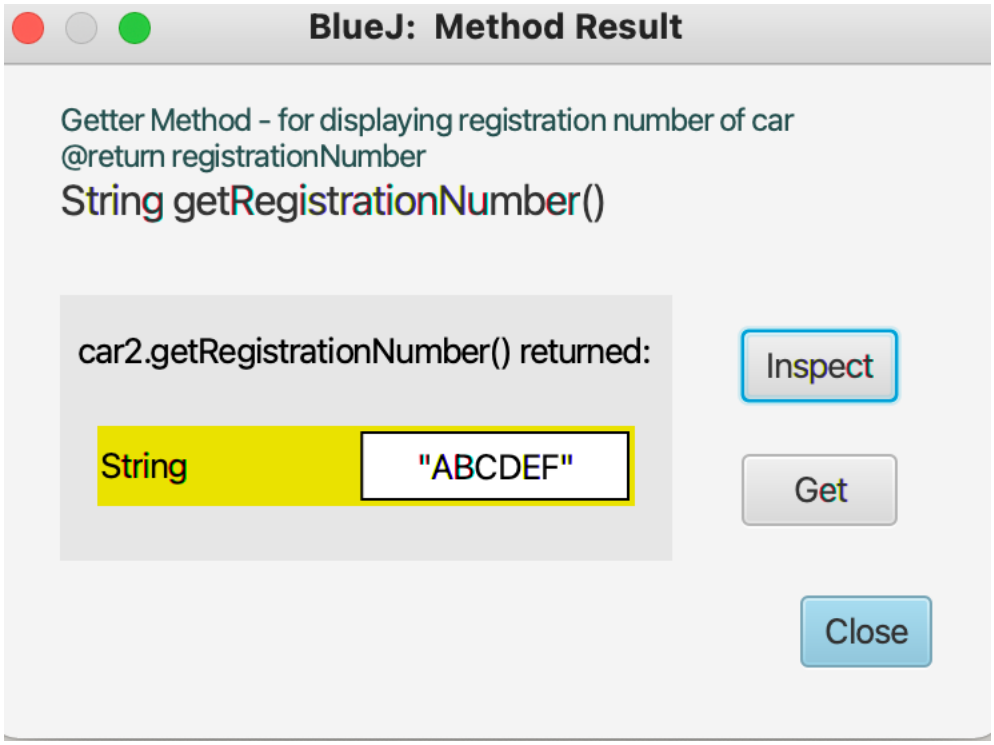
- ***getRegistrationNumber()***

  Test Data: “ABCDEF”

  Expected Results

  “ABCDEF”

  Actual Results



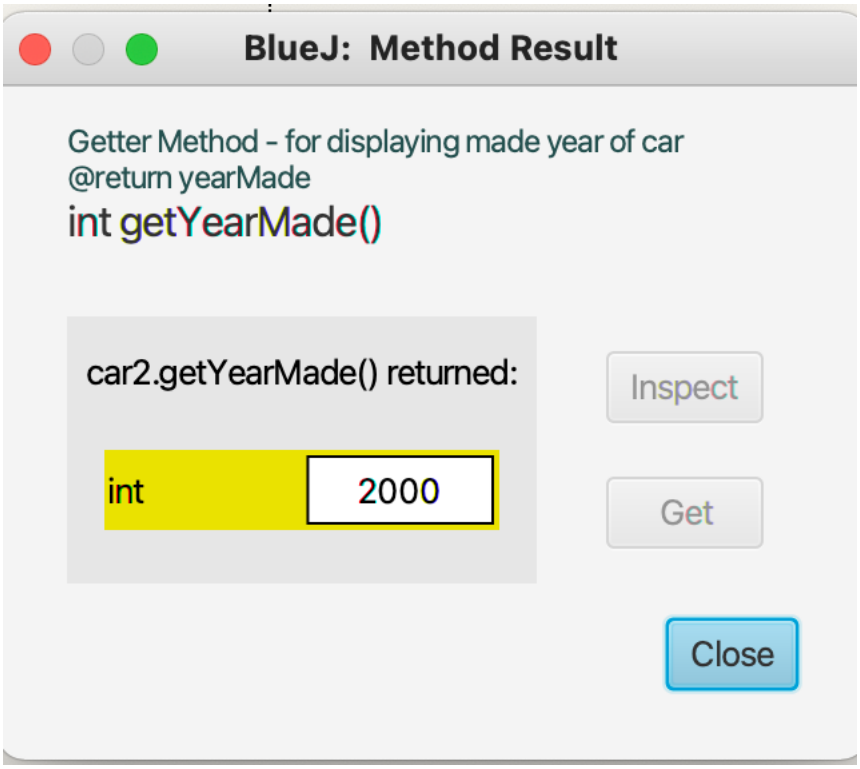
- ***getYearMade()***

  Test Data: 2000

  Expected Results

  2000

  Actual Results



3. **Test the mutator method**

- *Test setCarColour Method*

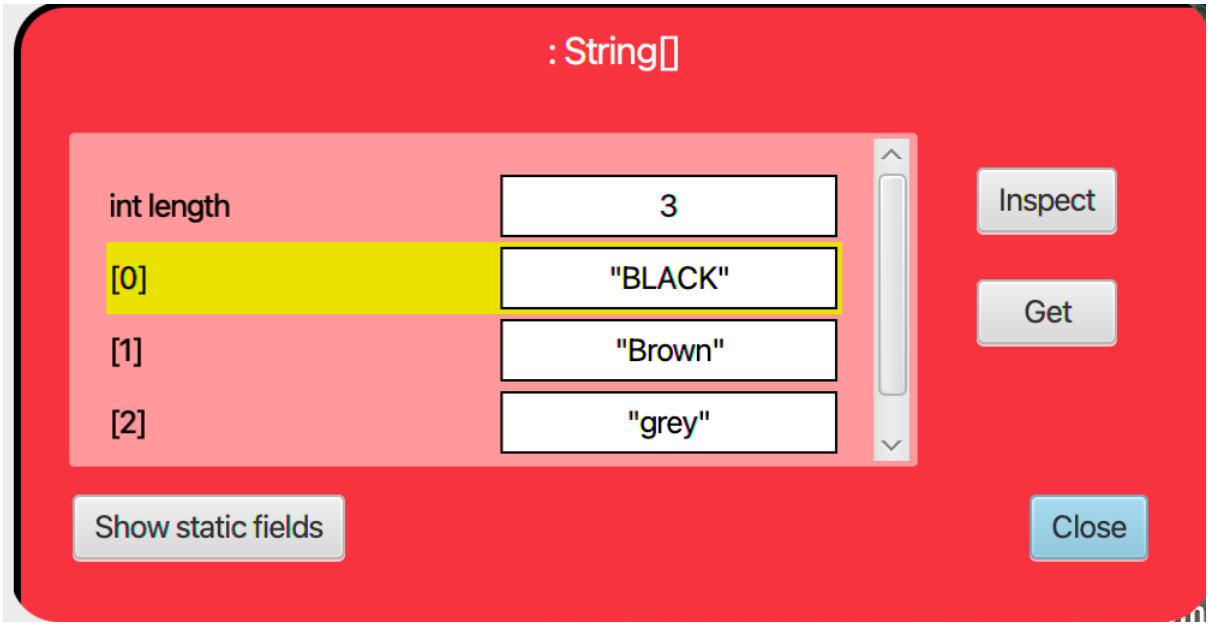
  Test Input: Positive Inputs

  “Black”,”Brown”,”grey’

  Expected Results

  “Black”,”Brown”,”grey’

  Actual Results



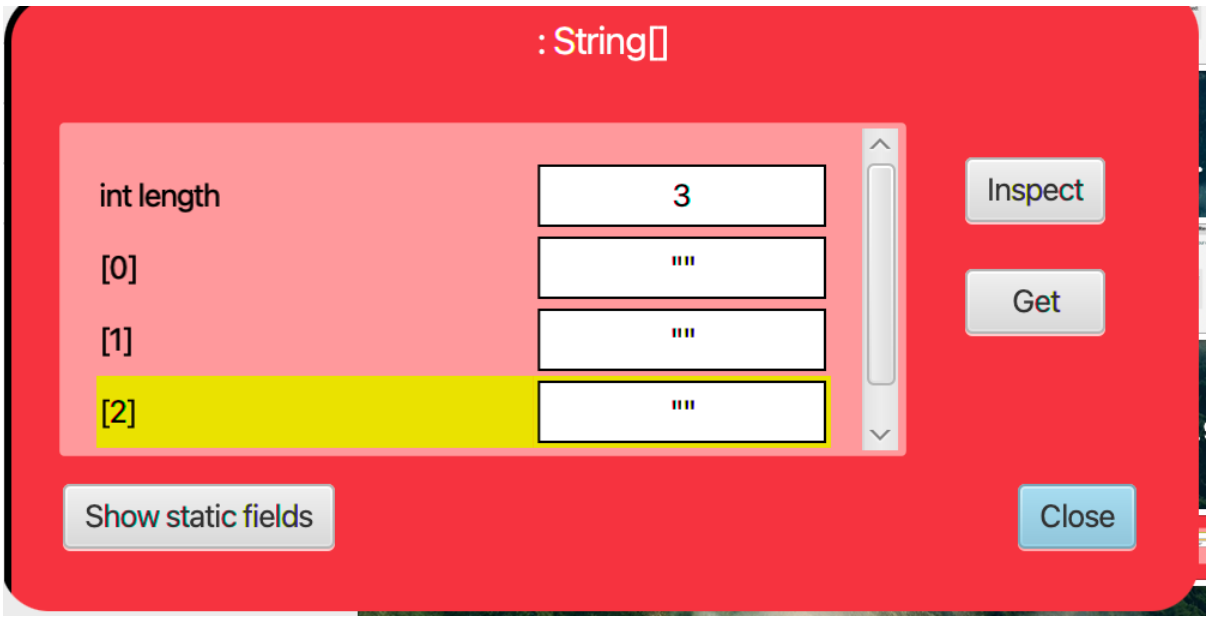
Test Inputs: Negative Inputs

“”,””,””,””,

Expected Results

“”, “”, “”, “”

Actual Results



- *Test setCarPrice Method*

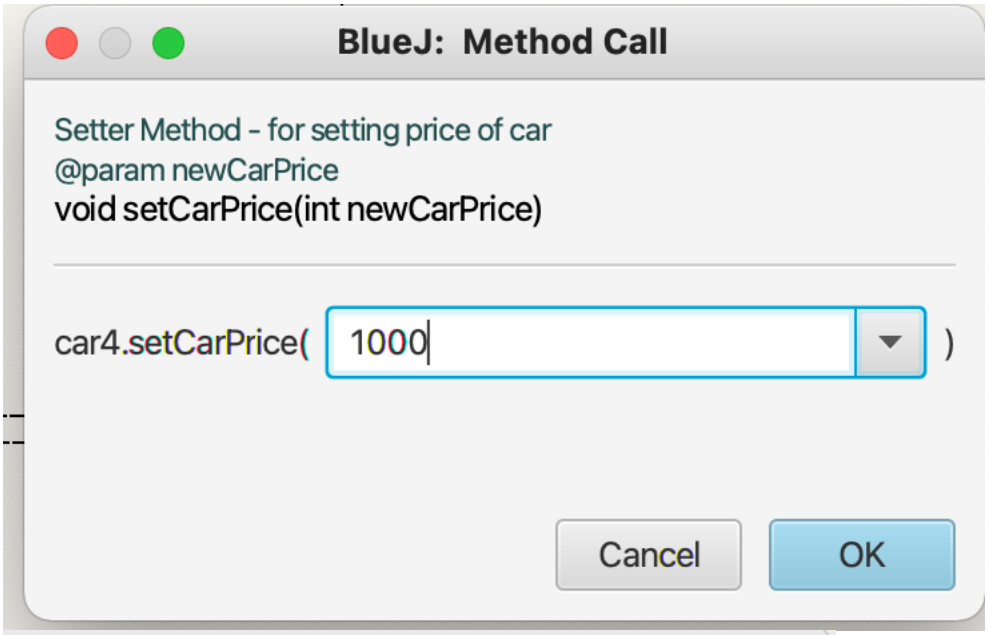
  Test Input: Positive Values

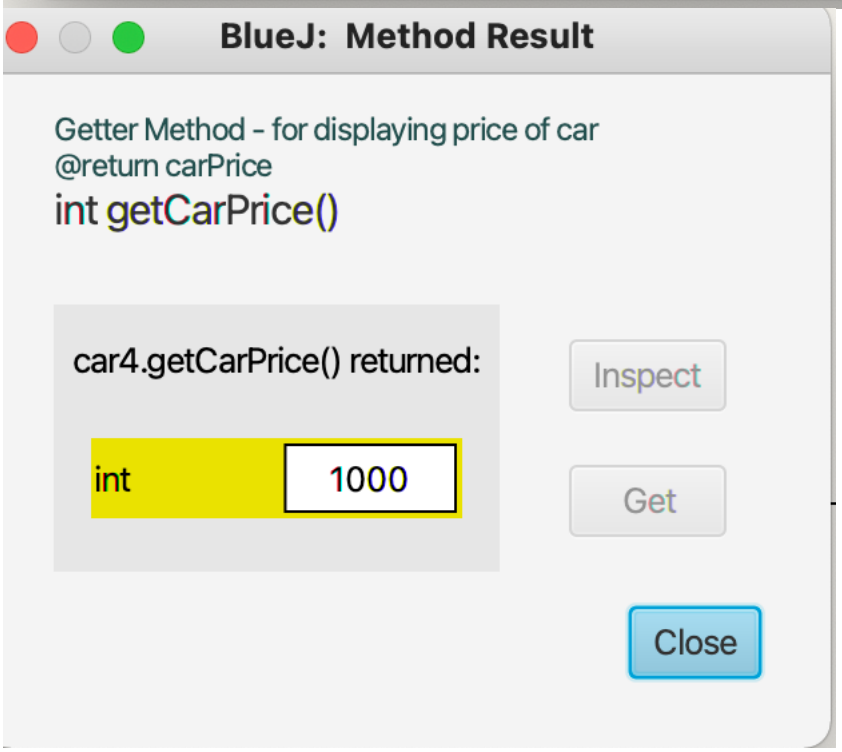
  1000

  Expected Results

1000

Actual Results





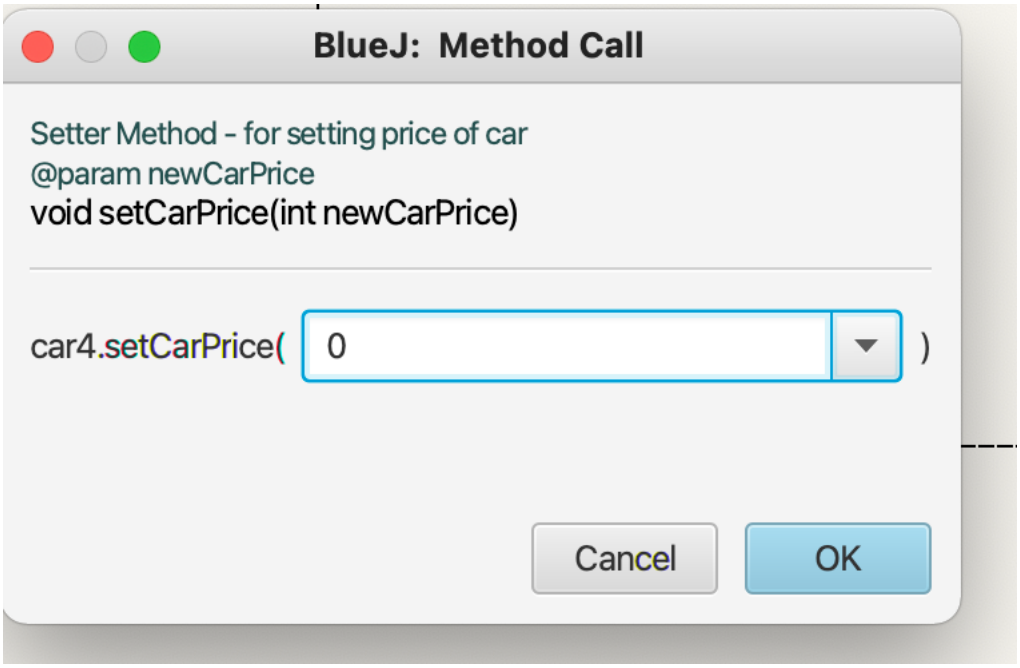
Test Input: Negative Values

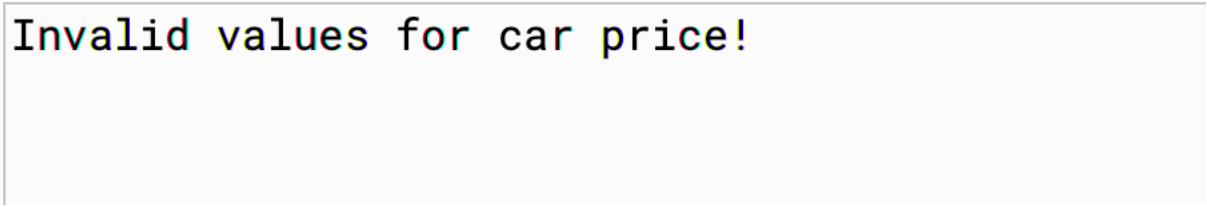
0

Expected Results

Error message on the screen: Invalid Values for the Car Price

Actual Results





4. Test the Display Method

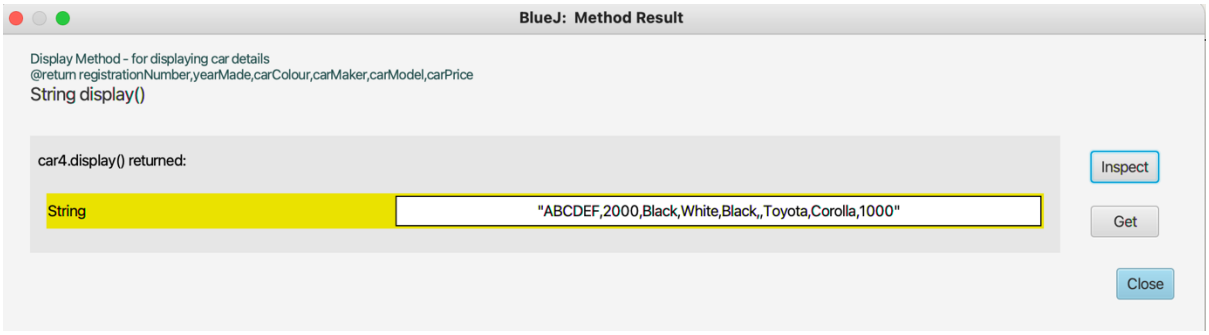
- Test Input: Positive Input (Input while creating a new object)

  “ABCDEF, 2000, Black, White, Black, , Toyota, Corolla, 1000”

  Expected Result

  “ABCDEF, 2000, Black, White, Black, , Toyota, Corolla, 1000”

  Actual Result



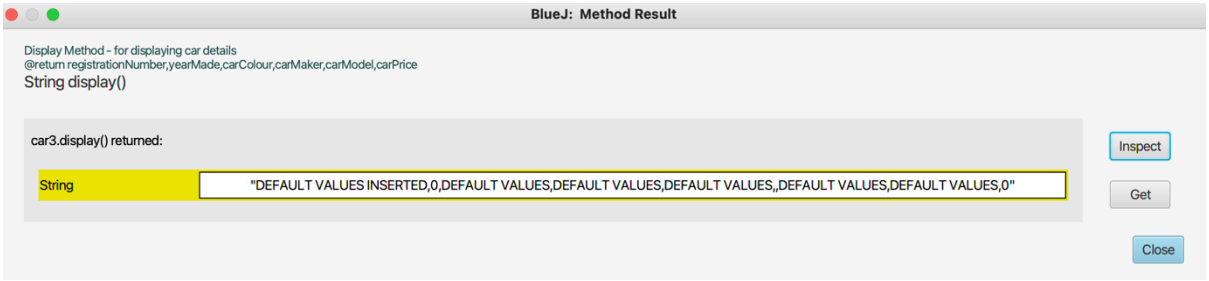
- Test Input: Negative Input (Input while creating a new object)

“DEFAULT VALUES INSERTED, 0, DEFAULT VALUES, DEFAULT VALUES, DEFAULT VALUES, , DEFAULT VALUES, DEFAULT VALUES, 0”

Expected Result

“DEFAULT VALUES INSERTED, 0, DEFAULT VALUES, DEFAULT VALUES, DEFAULT VALUES, , DEFAULT VALUES, DEFAULT VALUES, 0”

Actual Result



5. Test printCarColour method

- ***Testing with Input to the method***

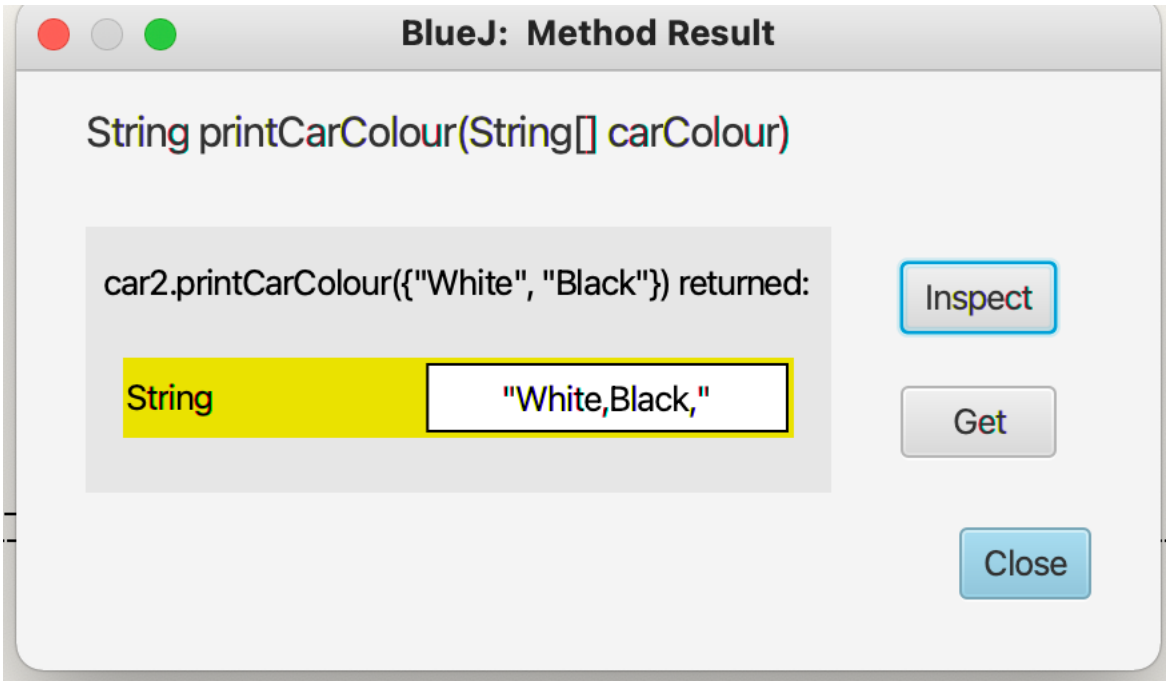
Test Input: Positive Input

“White”,”Black”

Expected Results

“White,Black,”

Actual Results



Test Input: Negative Input

“”,””,””

Expected Results

“,,,”

Actual Results