

Student Name: _____ Bryant Tunbutr _____ Project Number: _____ 4 _____
 Project Name: _____ BtunbutrProject4 _____ Visual Studio Version: _____ 2008 _____
 Date Due: _____ 11/22/12 _____ Date Turned In: _____ 11/22/12 _____

Above to be completed by student

Points (40 Possible)
Correctness/Efficiency:

Output is accurate	Show when not found	-1
Meets all requirements	Missing file input	-5
Provide appropriate user interface		
Logic is efficient		

Documentation/Coding Style:

Project can be open from the submitted zip file	
Folder is present and contains all necessary project files (no extra files)	
Use required coding template	
Use proper naming and spacing	
Submit all requested information	

Test Cases:

List all required test cases	
Provide output forms for important test cases	

Other issues:

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Extra Credit:

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Timeliness:

-3	
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Project Score:

31 / 40

Project specification

This software is intended to give the spark plug number that is equivalent to other brands.

It is designed to be run in Visual Studio 2008 using the C# coding.

It uses user input including the selected brand and number of the part.

It displays CCC brand number.

Used in the project are arrays, 2-dimensional arrays, methods, list boxes.

Project status

Can continue to work on it until Thursday.

The project is not complete.

I tried for many hours to get the text file into an array of structure.

I was successful in loading the file into string arrays using this code

```
//Load text file
TextReader tr = new StreamReader("C:\\Users\\bryantt\\Desktop\\project 4 3
test\\WindowsFormsApplication1\\bin\\Debug\\test.txt");

//lines loaded
int NumberOfLines = 5;

//array for each line
string[] ListLines = new string[NumberOfLines];

//Read the number of lines and put them in the array
for (int i = 1; i < NumberOfLines; i++)
{
    ListLines[i] = tr.ReadLine();
}

//Make array for each line
string[] ccc = ListLines[1].Split(new Char[] { ',' });
string[] brandsA = ListLines[2].Split(new Char[] { ',' });
string[] brandsB = ListLines[3].Split(new Char[] { ',' });
string[] brandsC = ListLines[4].Split(new Char[] { ',' });

// close the stream
tr.Close();
```

You don't really need 2-D array, but you can convert these 4 arrays to 2-D array.

However I was never able to get these string arrays to convert into a 2-dimensional array structure.

I tried parsing methods, I tried integer and character and string conversion without success. I also tried making using loops to create 2-dimensional arrays without success.

I also tried just using these arrays but was unable to do so successfully

I do know that these arrays worked in exporting the data from the text file because when used code like the following, I got successful results

```
textBox1.Text = brandsB[3].ToString();
```



I feel that the project is 95% complete, I am just missing one step of converting these string arrays into the 2-dimensional arrays that I used in the finalized project

Sketch of user interface

A hand-drawn sketch of a user interface for a program titled "Chris Car Center". The interface is enclosed in a rectangular border. At the top, the title "Chris Car Center" is written in a large, cursive font. Below the title, there is a horizontal line. Underneath this line, the text "Part Number" is written, followed by a rectangular input box. Below the "Part Number" input box, there are three radio button options: "BRAND A", "BRAND C", and "BRAND X". Below these options, there is a rectangular button labeled "Look Up". At the bottom of the interface, the text "CCC Part Number" is written, followed by another rectangular input box.

Chris Car Center

Part Number

☐ BRAND A

☐ BRAND C

☐ BRAND X

CCC Part Number

[illegible]

CISP 41

Programming in C#

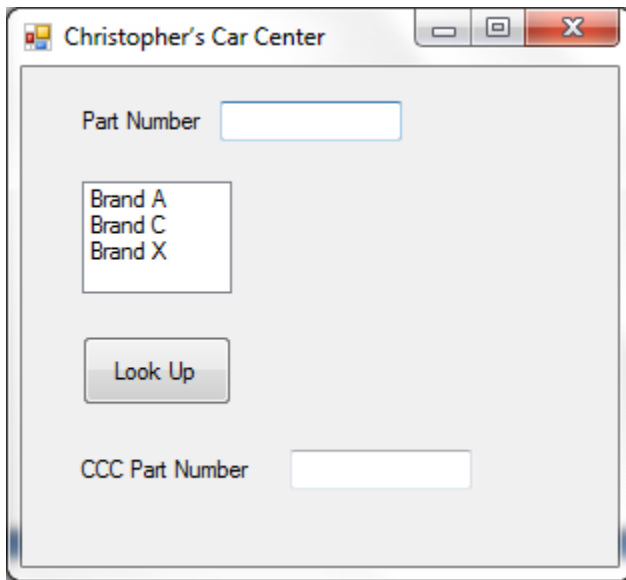
Event Plan for _____ BTunbutrProject 4_____Form

[illegible]

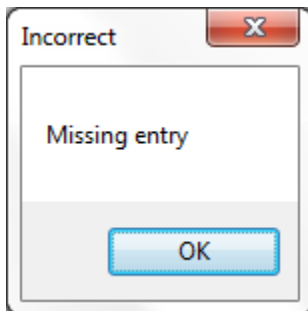
Test cases and captured screens

Test case #1

Nothing selected

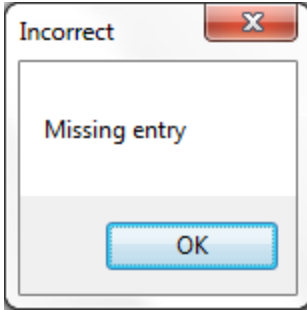


The screenshot shows a Windows application window titled "Christopher's Car Center". Inside the window, there is a "Part Number" text box at the top. Below it is a list box containing three items: "Brand A", "Brand C", and "Brand X". A "Look Up" button is positioned below the list box. At the bottom of the window, there is a "CCC Part Number" text box.

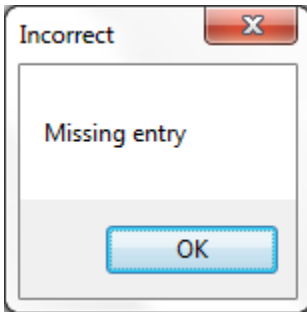


The screenshot shows a small dialog box titled "Incorrect". It contains a message that says "Missing entry". At the bottom of the dialog box is an "OK" button.

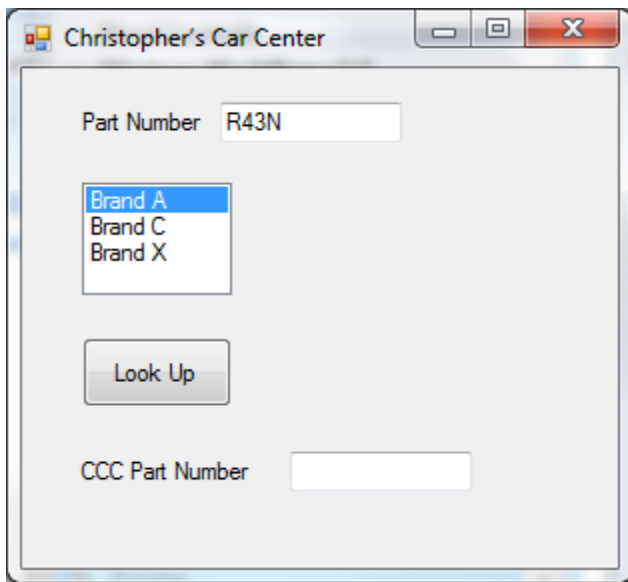
Test case #2a
Only a part number is entered



Test case #2b
Only a brand is selected



Test case #3



Christopher's Car Center

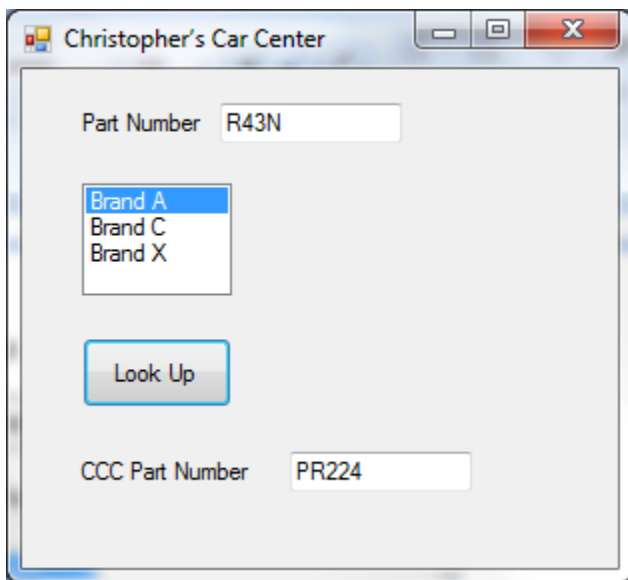
Part Number R43N

Brand A
Brand C
Brand X

Look Up

CCC Part Number

This screenshot shows the initial state of the application. The 'Part Number' field contains 'R43N'. The 'Brand' dropdown menu is open, showing 'Brand A', 'Brand C', and 'Brand X'. The 'Look Up' button is visible. The 'CCC Part Number' field is empty.



Christopher's Car Center

Part Number R43N

Brand A
Brand C
Brand X

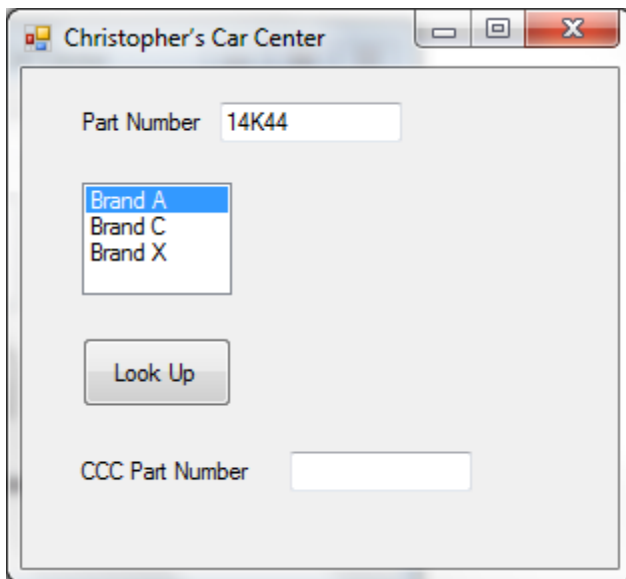
Look Up

CCC Part Number PR224

This screenshot shows the state of the application after clicking the 'Look Up' button. The 'CCC Part Number' field now contains 'PR224'. The 'Look Up' button is highlighted with a blue border.

Test case #4

Part #14K44 with each of the brands selected



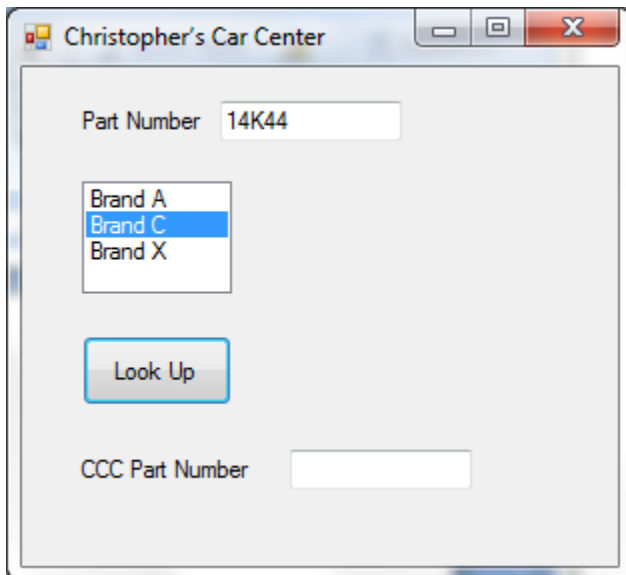
Christopher's Car Center

Part Number 14K44

Brand A
Brand C
Brand X

Look Up

CCC Part Number



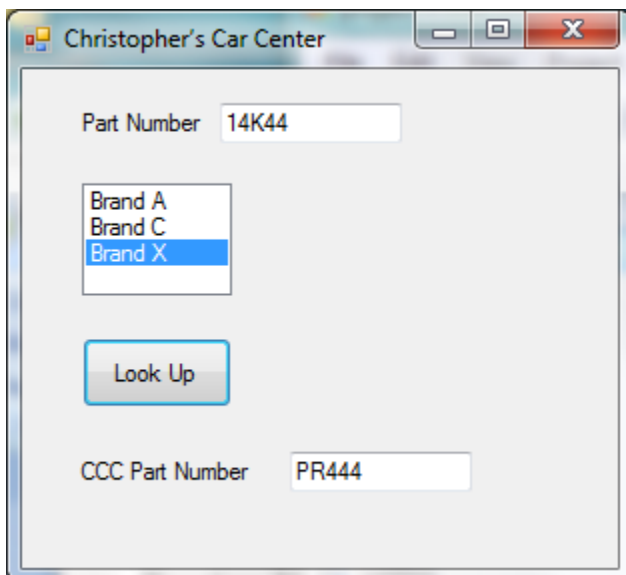
Christopher's Car Center

Part Number 14K44

Brand A
Brand C
Brand X

Look Up

CCC Part Number



Christopher's Car Center

Part Number 14K44

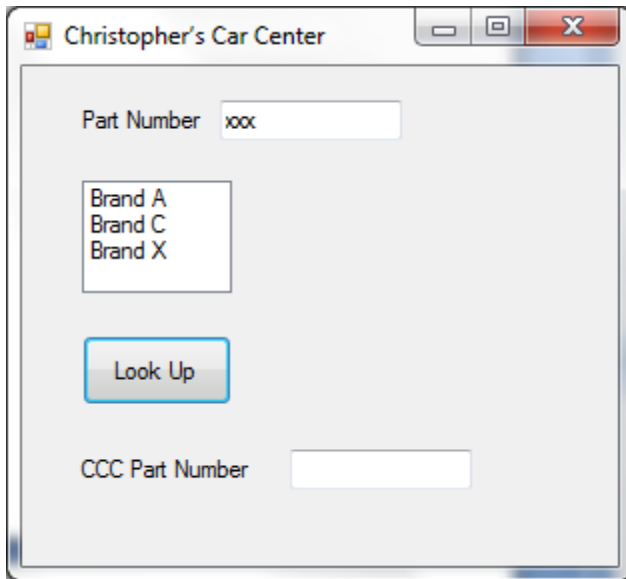
Brand A
Brand C
Brand X

Look Up

CCC Part Number PR444

Test case #5

A non existing part number is entered



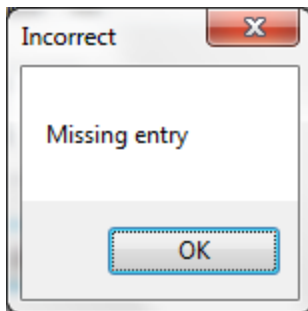
Christopher's Car Center

Part Number

Brand A
Brand C
Brand X

Look Up

CCC Part Number

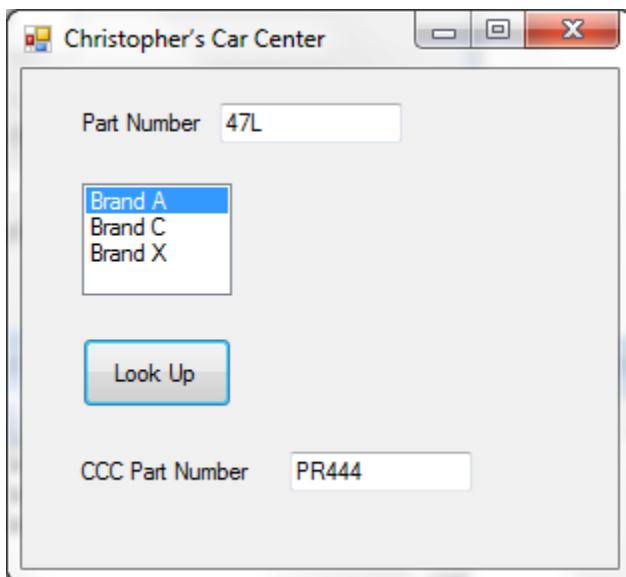


Incorrect

Missing entry

OK

Test case #6



Christopher's Car Center

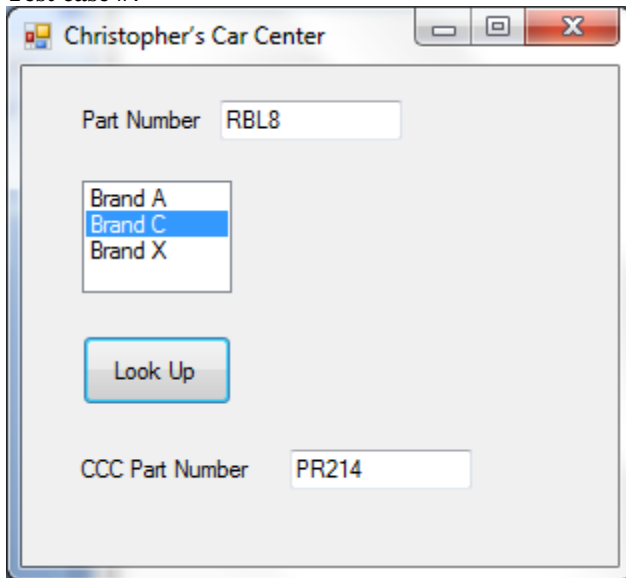
Part Number

Brand A
Brand C
Brand X

Look Up

CCC Part Number

Test case #7



A screenshot of a software application window titled "Christopher's Car Center". The window contains a form with the following elements: a "Part Number" text box with the value "RBL8", a dropdown menu showing "Brand A", "Brand C" (highlighted in blue), and "Brand X", a "Look Up" button, and a "CCC Part Number" text box with the value "PR214".

Christopher's Car Center

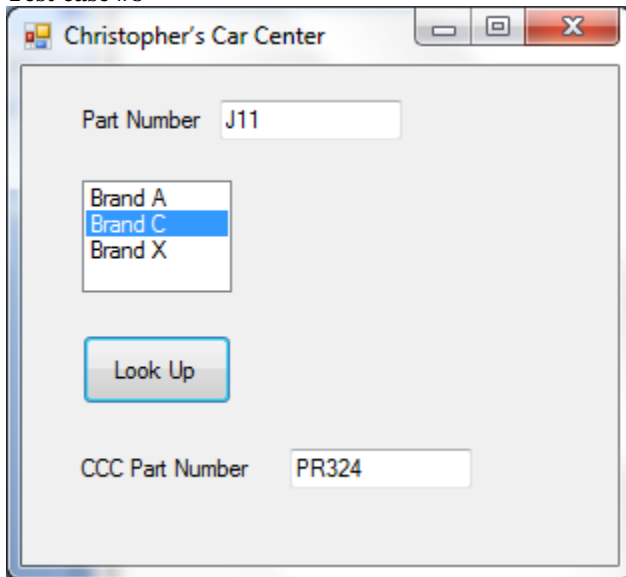
Part Number RBL8

Brand A
Brand C
Brand X

Look Up

CCC Part Number PR214

Test case #8



A screenshot of the same software application window titled "Christopher's Car Center". The form elements are identical to the previous screenshot, but the "Part Number" text box now contains the value "J11" and the "CCC Part Number" text box now contains the value "PR324".

Christopher's Car Center

Part Number J11

Brand A
Brand C
Brand X

Look Up

CCC Part Number PR324

```
/*
 * Project: BtunbutrProject4
 * Programmer: Bryant Tunbutr
 * Date: Nov 22 2012
 * Description: Uses array of structures to match part number with brand number
 * I certify that the code below is my own work.
 */

using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Windows.Forms;
using System.IO;

namespace WindowsFormsApplication1
{
    public partial class Form1 : Form
    {
        //Create arrays, 2 dimensional for brands
        string[,] brandsString = new string[9, 3];
        string[] cccString = new string[9];

        public Form1()
        {
            InitializeComponent();
        }

        private void lookUpButton_Click(object sender, EventArgs e)
        {
            //Organize by having each brand have same second integer,
            //i.e. Brand A has second integer of 0

            //Brand A
            brandsString[0, 0] = "MR43T";
            brandsString[1, 0] = "R43";
            brandsString[2, 0] = "R43N";
            brandsString[3, 0] = "R46N";
            brandsString[4, 0] = "R46TS";
            brandsString[5, 0] = "R46TX";
            brandsString[6, 0] = "S46";
            brandsString[7, 0] = "SR46E";
            brandsString[8, 0] = "47L";

            //Brand C
            brandsString[0, 1] = "RBL8";
            brandsString[1, 1] = "RJ6";
            brandsString[2, 1] = "RN4";
            brandsString[3, 1] = "RN8";
            brandsString[4, 1] = "RBL17Y";
            brandsString[5, 1] = "RBL12-6";
            brandsString[6, 1] = "J11";
            brandsString[7, 1] = "XEJ8";
            brandsString[8, 1] = "H12";

            //Brand X
            brandsString[0, 2] = "14K22";
        }
    }
}
```

```

brandsString[1, 2] = "14K24";
brandsString[2, 2] = "14K30";
brandsString[3, 2] = "14K32";
brandsString[4, 2] = "14K33";
brandsString[5, 2] = "14K35";
brandsString[6, 2] = "14K38";
brandsString[7, 2] = "14K40";
brandsString[8, 2] = "14K44";

//CCC NUMBER
cccString[0] = "PR214";
cccString[1] = "PR223";
cccString[2] = "PR224";
cccString[3] = "PR246";
cccString[4] = "PR247";
cccString[5] = "PR248";
cccString[6] = "PR324";
cccString[7] = "PR326";
cccString[8] = "PR444";

int brandInteger = brandListBox.SelectedIndex;
int lengthInteger = 9;

//make sure user has selected and entered data
if (partNumberTextBox.Text != "" && brandInteger != -1)

    for (int indexInteger = 0; indexInteger < lengthInteger; indexInteger++)
    {
        //match part number with brand number.
        if (partNumberTextBox.Text == brandsString[indexInteger,
brandInteger])
        {
            //display result.
            cccPartNumberTextBox.Text = cccString[indexInteger];
        }
    }

    //check for exeption.                Should indicate that part not found
    else                                if applicable.
    {
        MessageBox.Show("Missing entry", "Incorrect");
    }
}
}
}

```