

**Assignment Title**

University

Year 2023

**Second Assignment**

Labheshwar| 2K20/CSM/50

Visual Programming (C#)

Date of Submission: June 7, 2023

Academic Year: 2023

Institute of Mathematics & Computer Sience

**University of Sindh Jamshoro**

|  |  |
| --- | --- |
|  | OBJECTS AND PROPERTIES |
| Object | **Property** | **Setting** |
| CodeLabSalesForm | Name  Text  AcceptButton  CancelButton | **CodeLabSalesForm**  **CodeLab By Labhesh Sales Form calculateButton**  **clearButton** |
| headerLabel | Name  Text  Font  FontSize  Style | **headerLabel**  **CodeLab Sales Form**  **Corbel**  **24pt**  **Bold** |
| groupBox1 | Text | **(Blank)** |
| quantityLabel | Font  FontSize  Name  Text | **Corbel**  **12pt**  **quantityLabel**  **Number of Courses** |
| quantityTextBox | Font  FontSize  Name | **Corbel**  **10pt**  **quantityTextBox** |
| priceLabel | Font  FontSize  Name  Text | **Corbel**  **12pt**  **priceLabel**  **Price** |
| priceTextBox | Font  FontSize  Name | **Corbel**  **10pt**  **priceTextBox** |
| groupBox2 | Text | **(Blank)** |
| extendedPriceLabel | Font  FontSize  Name  Text | **Corbel**  **12pt**  **extendedPriceLabel**  **Extended Price** |
| extendedPriceTextBox | Font  FontSize  Name  Enabled | **Corbel**  **10pt**  **extendedPriceTextBox**  **False** |
| discountLabel | Font  FontSize  Name  Text | **Corbel**  **12pt**  **discountLabel**  **30% Discount** |
| discountTextBox | Font  FontSize  Name  Enabled | **Corbel**  **10pt**  **discountTextBox**  **False** |
| amountDueLabel | Font  FontSize  Name  Text | **Corbel**  **12pt**  **amoundDueLabel**  **Amount Due** |
| amountDueTextBox | Font  FontSize  Name  Enabled | **Corbel**  **10pt**  **amountDueTextBox**  **False** |
| groupBox3 | Text | **Summary Information** |
| totalAmountLabel | Font  FontSize  Name  Text | **Corbel**  **12pt**  **totalAmountLabel**  **Total Sales** |
| totalAmountTextBox | Font  FontSize  Name  Enabled | **Corbel**  **10pt**  **totalAmountTextBox**  **False** |
| numberTransactionsLabel | Font  FontSize  Name  Text | **Corbel**  **12pt**  **numberTransactionsLabel**  **Number of Transactions** |
| numberTransactionsTextBox | Font  FontSize  Name  Enabled | **Corbel**  **10pt**  **numberTransactionsTextBox**  **False** |
| calculateButton | Font  FontSize  Name  Text | **Corbel**  **12pt**  **calculateButton**  **&Calculate** |
| clearButton | Font  FontSize  Name  Text | **Corbel**  **12pt**  **clearButton**  **C&lear** |
| exitButton | Font  FontSize  Name  Text | **Corbel**  **12pt**  **exitButton**  **E&xit** |

**CODE**

/\* Project: Sales Form

\* Programmer: Labheshwar

\* Description: This project inputs sales information for CodeLab by Labesh.

\* It calculates the extended price and discount for

\* a sale.

\* Uses variables, constants, and calculations.

\* Includes error trapping and summary calculations.

\*/

using System;

using System.Collections.Generic;

using System.ComponentModel;

using System.Data;

using System.Drawing;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using System.Windows.Forms;

namespace SalesForm

{

public partial class CodeLabSalesForm : Form

{

private const decimal DISCOUNT\_RATE\_Decimal = 0.3m;

private decimal totalAmountDecimal;

private int numberTransactionsInteger;

public CodeLabSalesForm()

{

InitializeComponent();

}

private void calculateButton\_Click(object sender, EventArgs e)

{

// Declare the variables

int quantityInteger;

decimal priceDecimal, extendedPriceDecimal,

discountDecimal, amoundDueDecimal;

try

{

// Convert input values to numeric and assign to variables.

quantityInteger = int.Parse(quantityTextBox.Text);

try

{

priceDecimal = decimal.Parse(priceTextBox.Text);

// Calculate Values

extendedPriceDecimal = quantityInteger \* priceDecimal;

discountDecimal = Decimal.Round((extendedPriceDecimal \*

DISCOUNT\_RATE\_Decimal), 2);

amoundDueDecimal = extendedPriceDecimal - discountDecimal;

totalAmountDecimal += amoundDueDecimal;

numberTransactionsInteger++;

// Format and display answers

extendedPriceTextBox.Text = extendedPriceDecimal.ToString("C");

discountTextBox.Text = discountDecimal.ToString("N");

amountDueTextBox.Text = amoundDueDecimal.ToString("C");

// Format and display and summary information.

totalAmountTextBox.Text = totalAmountDecimal.ToString("C");

numberTransactionsTextBox.Text =

numberTransactionsInteger.ToString();

}

catch {

// Invalid price.

MessageBox.Show("Invalid price.", "Data Error");

priceTextBox.Focus();

priceTextBox.SelectAll();

}

}

catch {

// Invalid quantity.

MessageBox.Show("Invalid quantity.", "Data Error");

quantityTextBox.Focus();

quantityTextBox.SelectAll();

}

}

private void clearButton\_Click(object sender, EventArgs e)

{

// Clear the text boxes

quantityTextBox.Clear();

priceTextBox.Clear();

discountTextBox.Clear();

extendedPriceTextBox.Clear();

amountDueTextBox.Clear();

quantityTextBox.Focus();

}

private void exitButton\_Click(object sender, EventArgs e)

{

// End the program

this.Close();

}

}

}

**Graphical User Interface**

