



University Assignment

Year 2023

Second Assignment

Academic Year: 2023
Institute of Mathematics & Computer Science

Labheshwar| 2K20/CSM/50
Visual Programming (C#)
Date of Submission: June 7, 2023

OBJECTS AND PROPERTIES

<u>Object</u>	<u>Property</u>	<u>Setting</u>
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, amountDueDecimal;

            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);
        amountDueDecimal = extendedPriceDecimal - discountDecimal;
        totalAmountDecimal += amountDueDecimal;
        numberTransactionsInteger++;

        // Format and display answers
        extendedPriceTextBox.Text = extendedPriceDecimal.ToString("C");
        discountTextBox.Text = discountDecimal.ToString("N");
        amountDueTextBox.Text = amountDueDecimal.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

 CodeLab By Labhesh Sales Form—□×

CodeLab Sales Form

Number of Courses	<input type="text" value="3"/>
Price	<input type="text" value="99"/>

Extended Price	<input type="text" value="\$297.00"/>
30% Discount	<input type="text" value="89.10"/>
Amount Due	<input type="text" value="\$207.90"/>

Summary Information

Total Sales	<input type="text" value="\$207.90"/>
Number of Transactions	<input type="text" value="1"/>