

Ending Balance - Caleb ...

Starting Balance: \$15,000.00

Number of Months: 10

The ending balance for month 1 is \$15,075.00
The ending balance for month 2 is \$15,150.38
The ending balance for month 3 is \$15,226.13
The ending balance for month 4 is \$15,302.26
The ending balance for month 5 is \$15,378.77
The ending balance for month 6 is \$15,455.66
The ending balance for month 7 is \$15,532.94
The ending balance for month 8 is \$15,610.61
The ending balance for month 9 is \$15,688.66
The ending balance for month 10 is \$15,767.10

Ending Balance: \$15,767.10

Calculate!

Clear

Exit

```
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;

namespace lab5_1_CalebFontenot
{
    public partial class Form1 : Form
    {
        public Form1()
        {
            InitializeComponent();
        }

        private void calculateButton_Click(object sender, EventArgs e)
        {
            //Constant for the monthly interest rate.
            const decimal INTEREST_RATE = 0.005m;

            // Local variables
            decimal balance;    // The account balance
            int months;        // The number of months
            int count = 1;      // Loop counter, initialized with 1

            // Get the starting balance.
            if (decimal.TryParse(startingBalTextBox.Text, out balance))
            {
                // Pretty print the balance.
                startingBalTextBox.Text = balance.ToString("c");

                // Get the number of months.
                if (int.TryParse(monthsTextBox.Text, out months))
                {
                    // The following loop calculates the ending balance.
                    while (count <= months)
                    {
                        // Add this month's interest to the balance.
                        balance = balance + (INTEREST_RATE * balance);

                        // Display this month's ending balance.
                        detailListBox.Items.Add("The ending balance " +
                            "for month " + count + " is " +
                            balance.ToString("c"));

                        // Add one to the loop counter.
                        count += 1;
                    }

                    // Display the ending balance.
                    endingBalanceTextBox.Text = balance.ToString("c");
                }
                else
                {
                    // Invalid number of months was entered.
                    MessageBox.Show("Invalid value for months.");
                }
            }
        }
    }
}
```

```
private void clearButton_Click(object sender, EventArgs e)
{
    /*
    Clear the TextBoxes, endingBalanceTextBox control,
    and the ListBox.
    */
    startingBalTextBox.Text = "";
    monthsTextBox.Text = "";
    endingBalanceTextBox.Text = "";
    detailListBox.Items.Clear();

    // Reset the focus.
    startingBalTextBox.Focus();
}

private void exitButton_Click(object sender, EventArgs e)
{
    // Close the form.
    this.Close();
}
}
```