Lab 7: Repetition (Group B)

CS133, Beginning Programming: C#

Introduction

The objective of this lab is to introduce you to writing repetition (loop) statements C# code.

Assignment

Complete tutorials 5-1 through 5-3 in the textbook. (There are starting files in the source code that accompanies the textbook.)

Complete the following Programming Problems from the end of Chapter 5 in the textbook:

4. Population

Create an application that predicts the approximate size of a population of organisms. The application should use text boxes to allow the user to enter the starting number of organisms, the average daily population increase (as a percentage), and the number of days the organisms will be left to multiply. For example, assume the user enters the following values:

Starting number of organisms: 2

• Average daily increase: 30%

Number of days to multiply: 1

The application should display the following table of data in a ListBox control.

| Day | Approximate Population |
|-----|------------------------|
| 1 | 2 |
| 2 | 2.6 |
| 3 | 3.38 |
| 4 | 4.394 |
| 5 | 5.7122 |
| 6 | 7.42586 |
| 7 | 9.653619 |
| 8 | 12.5497 |
| 9 | 16.31462 |
| 10 | 21.209 |

(Gaddis 336)

6. Ocean Levels

Assuming the ocean's level is currently rising at about 1.5 millimeters per year, cre- ate an application that displays the number of millimeters that the ocean will have risen each year for the next 10 years. Display the output in a ListBox control. (Gaddis 336)

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7. Calories Burned

Running on a particular treadmill, you burn 3.9 calories per minute. Create an ap- plication that uses a loop to display the number of calories burned after 10, 15, 20, 25, and 30 minutes. Display the output in a ListBox control. (Gaddis 336)

Gaddis, Tony. Starting out with Visual C# 2012 (with CD-ROM), 3/e, 3rd Edition. Pearson, 06/2013. VitalBook file.

Files to Submit to Moodle

- A document containing screenshots of the applications you wrote for the Programming Problems running (label each screen-shot).
- · Zipped VS solution folders for each problem.
- The completed code review form for your lab work.
- A copy of the code review you gave to your code review partner.