Program 3

Worth: 50 points

Due: Thurday, November 7 (by 11:59 PM)

Purpose: This assignment explores the use of parallel arrays and range matching.

This assignment asks you to re-solve Program 2 using **parallel arrays and range matching** (as in the Chapter 6 PowerPoint slides) to perform the decision making for the selection of the registration time. **Use your instructor's solution to Program 2 Version 3** as your starting point, **attached here** and renamed for Prog3. After you extract the Prog3 folder, delete the original zip file (keeping only the Prog3 project folder) to avoid confusion with the file you will create and submit as your solution later. Nothing named Prog3-Start should remain.

In the starting code, keep the decision logic for assigning the registration date the same. You are only rewriting the code that performs the decision making for the selection of the registration time. Remember, Program 2 asked you to create a Windows Forms GUI application that will determine the earliest time that a continuing UofL *undergraduate* student may register for Spring 2020 courses using the priority registration schedule available from the Registrar's site: Spring 2020 Priority Registration Schedule for Continuing Students .

For this assignment, you have the choice to use either the lower limits or the higher limits for each letter range when constructing your range array. The code in the PowerPoint slides was written to work with lower limits. If you choose to use the higher limits from each range instead, you will have to modify the code as discussed on p. 240 of the text. The Program 2 Version 3 solution that you are starting from used the upper limits in its if/else logic. Either way you go, one array will hold the **char** values and the other array will hold the **string** values (you may use the existing named constants TIME1, TIME2, etc. when you populate this array).

Be sure to add appropriate comments in your code, including your **Grading ID** (not name nor student ID), program number, due date, and course section. Each variable used in your program needs a comment describing its purpose. These requirements are expected for every program and are listed in the syllabus. Preconditions and postconditions are not expected yet, as we've not covered them in class. However, comments are expected for important sections of code, including event handlers.

As with our labs, I'm asking you to upload a compressed ZIP archive of the entire project. Rather than giving me floppy disks or printouts, you will upload **all your files** to Blackboard using the *Assignments* tool. I'm asking you to upload a compressed ZIP archive of the entire project, just as with our labs. The steps for doing this will vary somewhat based on the ZIP utility being used. Before you upload this .ZIP file, it's a good idea to make sure that everything was properly zipped. Make sure your code is present and you can run your file. Once you have verified everything, return to the *Assignments, Programs* area of Blackboard. Click on "Program 3" and the *Upload Assignment* page will appear. Add any comments you like in *Comments* field. Click *Browse* next to *File to Attach* to browse the system for your file. Browse to the location of your .ZIP file and select it. Note, multiple files may be attached using the *Add Another File* option. For this assignment, we just need the "Prog3.zip" file. Make sure everything is correct in the form and then click *Submit* to complete the assignment and upload your file to be graded.

Remember, this is an **individual** assignment. Please be mindful of the syllabus' statement on academic dishonesty. If you are unsure about what constitutes academic dishonesty, **ASK!**