

Assignment

Deitel & Deitel Exercises 21.18, 22.4

HW12-1: (Deitel & Deitel Exercise 21.18)

21.18 (*Bucket Sort with `LinkedList<int>`*) In Exercise 18.7, you performed a bucket sort of `ints` by using a two-dimensional array, where each row of the array represented a bucket. If you use a dynamically expanding data structure to represent each bucket, you do not have to write code that keeps track of the number of `ints` in each bucket. Rewrite your solution to use a one-dimensional array of `LinkedList<int>` buckets.

HW12-2: (Deitel & Deitel Exercise 22.4)

22.4 (*Display Query Results App Modification*) Modify the app in Section 22.6 to contain a `TextBox` and a `Button` that allow the user to perform a search of the book titles in the `Titles` table of the `Books` database. Use a `Label` to identify the `TextBox`. When the user clicks the `Button`, the app should execute and display the result of a query that selects all the rows in which the search term entered by the user in the `TextBox` appears anywhere in the `Title` column. For example, if the user enters the search term “Visual,” the `DataGridView` should display the rows for *Simply Visual Basic 2010*, *Visual Basic 2012 How to Program*, *Visual C# 2012 How to Program* and *Visual C++ 2008 How to Program*. If the user enters “Simply,” the `DataGridView` should display only the row for *Simply Visual Basic 2012*. [*Hint: Use the `Contains` method of the `String` class.*] Also, provide a `Button` that enables the user to return to browsing the complete set of titles.

Grading Rubric

Each problem is worth 10 pts (score will be recorded as a percentage of that amount)

- 10% Properly submitted
- 10% Properly named
- 20% Adequate comments
- 10% Runs
- 20% Produces correct output
- 30% Effort evidenced by the submitted work