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CECS 475

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Lab 6 Explanation

Provide code to implement the queries of options a, b and c in word document.

Below is the following code that I had to modify to display the appropriate information for the assignment.

A. Get a list of all the titles and the authors who wrote them. Sort the result by title.

```
var titlesAndAuthors =  
    from book in dbcontext.Titles  
    from author in book.Authors  
    orderby book.Title1  
    select new  
    {  
        Name = author.FirstName + " " + author.LastName,  
        book.Title1  
    };  
  
// Display the result by Title  
outputTextBox.AppendText("\r\n\r\nTitles and Authors:");  
foreach (var element in titlesAndAuthors)  
{  
    outputTextBox.AppendText(String.Format("\r\n" + element.Title1 + " " +  
element.Name));  
}
```

- B. Get a list of all the titles and the authors who wrote them. Sort the result by title. For each title sort the authors alphabetically by last name, then first name.**

```
var authorsAndTitles =  
    from book in dbcontext.Titles  
    from author in book.Authors  
    orderby book.Title1, author.LastName, author.FirstName  
    select new  
    {  
        book.Title1,  
        author.FirstName,  
        author.LastName  
    };  
  
// Display the Authors and Titles with authors sorted for each title.  
outputTextBox.AppendText("\r\n\r\nAuthors and titles with authors sorted for each  
title:");  
foreach (var element in authorsAndTitles)  
{  
    outputTextBox.AppendText(String.Format("\r\n" + element.Title1 + " " +  
element.FirstName + " " + element.LastName));  
}
```

- C. Get a list of all the authors grouped by title, sorted by title; for a given title sort the author names alphabetically by last name first then first name.

```
var titlesByAuthor =  
    from book in dbcontext.Titles  
    orderby book.Title1  
    select new  
    {  
        titleOfBook = book.Title1,  
        Author =  
            from author in book.Authors  
            orderby author.LastName, author.FirstName  
            select new {author.LastName, author.FirstName}  
    };  
  
// Display Titles grouped by author  
outputTextBox.AppendText("\r\n\r\nTitles grouped by author:");  
foreach (var title in titlesByAuthor)  
{  
    outputTextBox.AppendText("\r\n" + title.titleOfBook + ":");  
    foreach (var author in title.Author)  
    {  
        outputTextBox.AppendText("\r\n" + author.FirstName + " " +  
author.LastName);  
    }  
}
```