Unit 03 Instructions - Querying - Selecting and Ordering data

Introduction to Enterprise Relational Databases

Instructions

Read these instructions all the way through before you start.

Download the answer document. Be sure to put your name at the top of the answer document where that's indicated. Answer the questions below in that document and when you are done, upload it into Blackboard.

Overview

In this unit we take a deeper dive into the SQL SELECT statement. We'll learn how to filter and sort the results of our queries.

Preparing your SQL

At the top of each query's SQL make sure you include comments with the step number and your name and a one sentence explanation of what the query is for. Then put USE statement below.

```
-- 3.1 - Your Name
-- Students with a Scholarship more then $2,500

USE Starter;
```

Don't forget to beautify your SQL. Be sure to give me the text of your SQL (not a screen shot of it) and a screen shot of the Result Grid - you need to show only first 6-10 rows. If you're not sure about these, see Unit 02 instruction for details on how to do that.

Steps

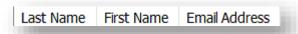
Be sure to download and run the Starter create script before you start these steps.

In each of these queries you're shown the columns to display in your result. <u>Make your column headers</u> <u>look exactly like the example shown</u>. All these queries use the Starter database.

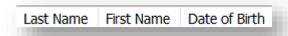
1. [4] Write a query to list the first and last names and scholarship of all students with a scholarship more than \$2,500. Sort on Last Name.



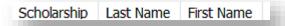
2. [4] Write a query to list the first and last names and email of all students with the last name Cruz. Sort on First Name.



3. [4] Write a SQL SELECT statement to list the first and last names and date of birth of all students born before 1997. Sort so the youngest students are at the top of the list.



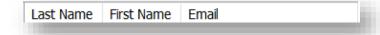
4. [4] Write a query to list all students whose scholarship is at least \$2,000 but less than \$3,500. Sort from lowest scholarship to the highest and then by last name.



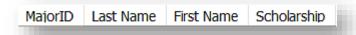
5. [4] Write a query to list all student majoring in Computer Science or Information Systems. Sort by last name. Tip: You'll need to filter on MajorID. To find out the IDs of these departments, run a SELECT * on the Major table.



6. [4] Write a query to list all female students who major in Biology or Anthropology.



7. [4] Write a query that uses the IN clause to list all students with a \$4,000 scholarship and who are majoring in Computer Science, Mathematics or Criminal Justice. Sort by MajorID then last name.



8. [4] Write a query that uses the BETWEEN clause to list all students who enrolled last year. Sort by last name then first name.



9. [4] Write a query that uses the LIKE clause to list all students whose last name starts with S. Sort by last name.



10. [4] Write a query that uses the LIMIT clause to list the five oldest students. Sort so the oldest student is first.



11. [4] Write a DIY (Do It Yourself) query of your own design that uses at least three of the capabilities demonstrated in the steps above (AND, OR, LIMIT, BETWEEN, etc.). Of course, you can't reuse any of the queries above. Write a sentence explaining the purpose of your query. Don't tell me how you did it, I can see that by looking at your SQL. Tell me its purpose.

When you are done, close and upload your answer document into Blackboard. Remember, you must submit either a .DOC or .DOCX file.