Homework #6

This homework assignment is about applying Advanced SQL techniques to writing queries. A table with sample data is provided to you. Part 1 requires you to determine the results of a query using advanced SQL. Part 2 requires you to write a query that will produce the desired results. Submit your homework in a Microsoft Word document to UNM Learn.

Class Table and Data

The *Class* table contains information about students, classes and grades. In this example, we are not concerned with normalizations. The goal is the use the data provided and write SQL statements to view the desired output. The *score* attribute is a number data type, the *DOB* attribute is a date data type and all other attributes are string data types.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Class** | | | | | | |
| **classID** | **fName** | **lName** | **DOB** | **className** | **Score** | **Grade** |
| MGMT329 | Aaron | French | 04/04/1950 | Database | 98 | A |
| MGMT329 | Jessica | McMurphy | 05/29/1990 | Database | 85 | B |
| MGMT329 | Michael | Johnson | 07/02/1989 | Database | 92 | A |
| MGMT329 | Lebron | West | 07/21/1992 | Database | 74 | C |
| MGMT329 | Steven | McGiver | 03/13/1989 | Database | 79 | C |
| MGMT329 | Amanda | Stephenson | 04/19/1992 | Database | 88 | B |
| MGMT329 | Jeremy | Jones | 07/15/1991 | Database | 90 | A |
| MGMT450 | Amanda | Stephenson | 04/19/1992 | Computer Based IS | 83 | B |
| MGMT450 | Samantha | Givens | 09/11/1988 | Computer Based IS | 86 | B |
| MGMT450 | Leslie | McRoberts | 05/30/1989 | Computer Based IS | 94 | A |
| MGMT450 | Jeremy | Jones | 07/15/1991 | Computer Based IS | 75 | C |
| MGMT450 | Brittany | Davidson | 12/24/1990 | Computer Based IS | 91 | A |
| MGMT450 | William | O’Connell | 01/07/1992 | Computer Based IS | 97 | A |
| MGMT450 | Aaron | French | 04/04/1950 | Computer Based IS | 83 | B |

Part 1 – Results of a Query

A series of queries are provided to you. Use the *Class* table above to determine the output that would result from each query.

1. SELECT count(\*) from class;

2. SELECT Distinct Ucase(className) from class;

3. SELECT className, avg(score)

FROM class

WHERE grade=’A’

GROUP BY className;

Part 2 – Writing Advanced Queries

You will be provided the results of a query from the *class* table. Your task is to write the query that would produce those results.

1. Display the number of students from each class who got an A or B in the course.

className grade count(grade)

Database A 3

Database B 2

Computer Based IS A 3

Computer Based IS B 3

2. Display the className, grade and how many students got an A, B or C in the class. Filter the data to only display the class and grades where there is a count less than 3.

className grade count(grade)

Database B 2

Database C 2

Computer Based IS C 1

3. Display the last name of all students who have more than 8 characters in their name. The query results should only display unique values (no duplicate results). The results should appear in descending alphabetical order.

lName Lenth

Stephenson 10

O’Connell 9

McRoberts 9

Grading

Upload a Microsoft Word document containing your answer to UNM Learn.