CIST 1220: SQL - Assign #3

**(60 Points)**

**DUE: by Monday June 27, 2016 11:55pm.**

[Order By/Functions – Chap 5]

Using the database provided, Write and Execute SELECT statements to get the following information:

***Order By*** :

1. List of Students, first name and last name only, in alphabetical order by last name.
2. List all students, only id, first name, last name and gpa. The student with the highest gpa should be listed first.
3. Same as #2 above except the student with the lowest gpa should be listed first.
4. List all sections, all columns, sorted by instructor id.
5. List all sections, all columns, sorted by roomNo.
6. List all courses, all columns, sorted by creditHours
7. List all students, all columns, sorted first by state, then within each state, sorted by last name.
8. Which student (give id, first name and last name) has the lowest gpa? Use order by to see a list of students in order by gpa, and read the name of the student with the lowest gpa.

***Functions*** :

1. What is the average gpa for all students?
2. How many students are there from Illinois?
3. If a student were to take three courses(CIST 1001, CIST 1122 and CIST 1130) how many credit hours would this student be taking?
4. How many sections are being taught by the instructor with id 3?

[Group By/Functions – Chap 6]

***Group By*** : Using the database provided, Write and Execute SQL SELECT statements, using GROUP BY, to get the following information:

***Group By*** :

1. How many classes are scheduled in each room?
2. How many sections of each course are there being taught?
3. Which courses have only 1 section being taught?
4. What is the avg gpa for all students from each different state?
5. Which states have an avg gpa higher than 3.0?
6. How many courses is each instructor teaching?
7. Do we have more 3 credit hour courses or 7 credit hour courses.(use Group by to answer this question)
8. How many instructors do we have from each state?
9. Same as #7 above, but only list the states that have 3 or more instructors.
10. How many students are there from each state?
11. Same as #10 above, but only list the states that have 2 or more students.

*USE the StudentSchedule Table for the last questions!*

1. How many students are there in each each Section being taught?
2. Which Sections have less than 3 students?