95 – 703: Database Management

SQL #2 (hardcopy due on July 21, in class before the lecture starts)

*Turn in a well formatted printout of your SQL statements as they were executed in the SQL*Plus environment and the results of running each statement (provide echo and feedback). Set the LINESIZE and PAGESIZE values optimally to ensure that there are no wrapping lines or repeated column headers in the results (refer to the "**Formatting SQL Output**" document available on the class website). Identify each answer clearly.*

Execute script '**SQL_script2.txt**' provided on the class website to recreate the "Training" database needed to answer the following questions. Use only the SQL concepts covered in lectures by July 14 to answer the questions below. Do not use any SQL concept that has not yet been discussed in class. Each question should be answered by a single query unless requested otherwise. If a query generates **NULL** values in any column, replace the **NULL** value with an appropriate information/value. Any string comparison requires using LOWER or UPPER function to prevent case mismatch.

1. For each employee from IT Department, provide the number of months that passed since the most recent class approval. List ID and name of the employee as well as the number of complete months (only integer value). Order the result alphabetically by employee last name.

2. List the class, which has generated the highest expenses. Also, display the class title and the expense/cost.

3. Find the most popular course (based on the number of our employees that took the course). List the course title, the college name that offered the course, and the measure of popularity. Use a subquery without referring to pseudocolumn "rownum."

4. List the total number of employees that had training approval last year for classes offered by *Oakland* College.

5. Provide information on courses that *Pat Boon* has taken more than once. List course ID and title, college that offered the class, number of times it was taken, and the total tuition of the class he took more than once. As the last row, provide the total tuition of all the classes he took *(not only the course taken more than once).*

6. List all instructors (include their ID, name, and Phone). For the instructor who taught more than one class provide the number of classes they taught and the number of our employees who took classes from the instructor. Order results by the instructor last name.

7. For each supervisor, list the number of employees he supervises that took and passed *Java* or *C++*. Include all supervisors.