**CSC 150 – Database Design - Take-Home Final May 6, 2010**

This portion of the final exam maybe completed using any book, web site, or class notes that you wish to use. It may **NOT** be done with the help of anyone else. **Doing so will guarantee a grade of F for the entire final exam**.

For each task description below, write and execute the appropriate SQL statement. Please show the statement followed by a screen-capture of the resulting table. Be sure to put a header on your final document so your name appears on all the pages of the exam. Number all of your answers so I am absolutely clear which question you are answering as some questions will have more than one result or step.

The tables used for this exam are the L\_Lunch Database tables that we have been using all semester. (p. 784 of your textbook shows all of the tables, their column names, and the relationships between the tables) All answers should be shown in one table unless otherwise noted. Any new columns created should be named appropriately. Each question is worth 10 points.

If you have any questions, please e-mail me at sue@ttsw.com. I will return an answer within 24 hours.

Good luck!!

1. Using the l\_Foods table, show the supplier\_id, the product\_code, the description then find what the new price of the food items will be once the price\_increase for the food products has be enacted. Show the results twice; once not adjusting for any null values and a second time showing how null values can be converted to zeros. Order the results by first the supplier\_id, then the product\_code.
2. Using the l\_Lunches table, show the Lunch\_Id and the Lunch\_Date with the Lunch\_Date first displayed as the number of the day of the week only, then as the abbreviated day of the week, the date with the time also displayed, and lastly, find the number of days between the current date and the date of each lunch displayed as an integer.
3. Using the l\_Employees table, show the employee\_id, last\_name, first name, and hire\_date of all of the employees as well as the total number of days an employee has worked for the company. Save your query. Using the saved query create a query that will both find and display all of the information found in the first query for both the employee who has worked for the company the longest and the employee who has worked for the company for the shortest number of days.
4. Using the l\_Foods table, display the supplier\_id and find the count of each product that supplier provides, a summation of the product prices for each supplier and the total price increase for each items for each supplier. Order your results by the supplier\_id.
5. Using the l\_Employees table, show the number of employees working grouped by manager\_id and dept\_code. Next, use the having clause, remove any results having a null value in the manager\_id field. Finally, show the results using the where clause instead of the having clause.
6. Using the l\_lunch\_items table, find the lunch\_id (s) for the lunch(es) which have the maximum number of items (hint: use the quantity field).
7. Show the results of a query that displays the following fields in the specified order: supplier\_name, product\_code, description, price of the food choices available for lunch all ordered by the supplier\_code and product\_code.
8. Show the results of a query that will the lunch\_id, lunch\_date, and employee\_name (first\_name and last\_name concatenated) ordered by the lunch\_date then the lunch\_id.
9. Show the results of a query that counts the number of employees for each department grouped and ordered by the department\_name for all departments that have more than one employee.
10. Show the results of a query that counts the number of lunches each employee is attending. The results should show the employee\_id, first\_name, last\_name of the employees as well as the count of the number of lunches they are attending. The results should be in descending order by the count of lunches, then by the employee’s last name.

**Extra Credit – 10 points**

Show the results of a query that will display, ordered by employee\_id, lunch\_date, and product\_code - the employee’s id, first name, last name, lunch date and the description and quantity of each item the employee has chosen for his/her lunch as well as the total cost for each lunch item replacing all nulls by zeros and formatting the answer as currency.