CMSC 424–0201 Fall 2004 PHW01 (100 pts.) Due Tue, 14 Sep 2004

Name: _____

This assignment is a very simple getting-started exercise to familiarize you with the setup of your class accounts. You will need to use all four of your class accounts (DC, linuxlab, Oracle, and PostgreSQL) for this assignment. You should submit (1) a hardcopy of this homework with your answers filled in and (2) an electronic file as detailed below.

You are welcome (and encouraged) to use any resources (e.g., Web sites) to help you with your work. However, **all such help must be clearly noted** in your submissions. Further, no matter what you use, **you must be able to explain** how and why it works.

Please post your questions to the class newsgroup, so that everyone benefits from the discussion.

1. (10 pts.) Read the class Web page, paying particular attention to the class policy. Sign your name here to indicate that you have read this material: _____

2. (6 pts.) Change the passwords on your OIT Unix ("detective cluster" or "dc"), Oracle, CSIC ("linuxlab"), and PostgreSQL accounts. (Note that the linuxlab and PostgreSQL accounts have logically distinct passwords, even though the initial passwods are the same.) Fill in the following information:

Account	User Name	**Old** Password
dc		
Oracle		
linuxlab		
PostgreSQL		

   Make sure you enter your old, and not new, passwords above!

3. (4 pts.) Change the *finger* information on your `dc` account so that *finger youracct* shows your real name (as in class registration records) in the *In real life* field. (Type `man chfn` and `man finger` at the Unix prompt if you don't know how to make this change.) Repeat for your `linuxlab` account. Fill in the name you entered below:

   _____

4. (10 pts.) Design a database table, called `Boxes`, that will hold information about types of cardboard boxes used for packing. For each box type, the table should record an identifying name, the size (width, depth, and height, in inches), the maximum load (in pounds weight), the color, and the price (in USD). Pick what you believe to be

the most appropriate type for each field. Exhibit the `create table` statment used to create this table below:

5. (10 pts.) Insert five rows into the `Boxes` table created above. Pick realistic values for each field, and include at least three boxes with price lower than 5. Exhibit below the `insert` statements used to populate the `Boxes` table.

6. (10 pts.) Write a SQL query that returns the name and maximum load of boxes costing less than $5.

7. (10 pts.) Write a SQL query that deletes all the rows in the `Boxes` table and destroys the `Boxes` table.

8. (30 pts.) Produce a plain-text file, `f1.txt`, containing a screen capture of a `sqlplus` session that performs the actions indicated in Questions 4–7. Produce a similar file, `f2.txt`, containing a screen capture of a `psql` session that performs the same actions. You may find the `script` program useful for generating these files. (Type `man script` at the Unix prompt for help.)

9. (10 pts.) Concatenate the files `f1.txt` and `f2.txt` and name the new file *`foo`*`-`*`bar`*`.txt`, replacing *foo* with your last name suffixed with your initials (e.g., HendrixJM.txt) and *bar* with an arbitrary 4-digit number (e.g., 1664). Compress the text file using gzip; the resulting file should be named *`foo`*`-`*`bar`*`.txt.gz` (e.g., `HendrixJM-1664.txt.gz`). Upload *`foo`*`-`*`bar`*`.txt.gz` using anonymous FTP (using `anonymous` as the user name and your email address as the password) to the FTP server `ftp.cs.umd.edu` in directory `/incoming/cmsc424-0201/`. (If you upload the wrong file by mistake, you can upload another, but you will need to use a different name—say, *`foo`*`-`*`bar`*`-2.txt.gz`.) You will not be able to list the FTP upload directory (standard security setup), so pay attention to the diagnostic messages from your FTP program. If the messages indicate success, your file will have been uploaded. Please upload the file before you submit your hardcopy homework. Write down the name of the file you uploaded below: