CSCD 327 Lab #3 (15 points)
Due: January 29, 2014

Section 1: Use database *YourUsername_1* to complete the following queries in SQL.

1. (1 point) Find all employees assigned to department number 10.

2. (1 point) Find all the employees in department 10, along with any employees who earn a commission (i.e., comm isn't null), along with any employees in department 20 who earn at most $2000.

3. (1 point) List the ENAME and JOB of employees assigned to department number 10.

4. (1 point) Can you display the query result from *Question 3* as the following? (Hint: MySQL supports a function called CONCAT to concatenate values from multiple columns.)

Works_As
CLARK WORKS AS A MANAGER
KING WORKS AS A PRESIDENT
MILLER WORKS AS A CLERK

5. (2 points) Sometimes you want to perform IF-ELSE operations on values in your SELECT statement. For example, you would like to produce a result set such that, if an employee is paid $2000 or less, a message of "UNDERPAID" is returned, if an employee is paid $4000 or more, a message of "OVERPAID" is returned, if they make somewhere in between, then "OK" is returned. The result set should look like this:

```
ENAME             SAL  STATUS
---------- ----------  ---------
SMITH              800  UNDERPAID
ALLEN             1600  UNDERPAID
WARD              1250  UNDERPAID
JONES             2975  OK
MARTIN            1250  UNDERPAID
BLAKE             2850  OK
CLARK             2450  OK
SCOTT             3000  OK
KING              5000  OVERPAID
TURNER            1500  UNDERPAID
ADAMS             1100  UNDERPAID
JAMES              950  UNDERPAID
FORD              3000  OK
MILLER            1300  UNDERPAID
```

Hint: Use the CASE expression to perform conditional logic directly in the SELECT statement. CASE is combined with WHEN and THEN to specify the condition.

6. (1 point) Find all the employees in departments 10 and 20, and return only those that have either an "I" somewhere in their name or a job title ending with "ER".

7. (1 point) Return employee names and jobs from table EMP and sort by the last THREE characters in the job field. The result set should look like the following:

```
ENAME       JOB
----------  ---------
KING        PRESIDENT
SMITH       CLERK
ADAMS       CLERK
JAMES       CLERK
MILLER      CLERK
JONES       MANAGER
CLARK       MANAGER
BLAKE       MANAGER
ALLEN       SALESMAN
MARTIN      SALESMAN
WARD        SALESMAN
TURNER      SALESMAN
SCOTT       ANALYST
FORD        ANALYST
```

Hint: MySQL supports SUBSTR function and LENGTH function. **SUBSTR(str,pos)**: Select all characters from <str> starting with position <pos>. **LENGTH(str)**: Return the length of <str>.

Section 2: Use database *YourUsername_3* to complete the following queries in SQL.

8. (1 point) Find all the books that are **NOT** in the Fitness category. List each book title and category.

9. (1 point) Find all the customers who live in Georgia or New Jersey. Put the results in ascending order by last name. List each customer's customer number, last name, and state.

10. (1 point) List all authors whose last name contains the letter pattern "IN". Put the results in order of last name, then first name. List each author's last name and first name.

11. (1 point) Use a search pattern to find any book title with "A" for the second letter and "N" for the fourth letter. List each book's ISBN and title. Sort the list by title in descending order.

12. (3 points) List the title and publish date of any computer book published in 2005. Perform the task of searching for the publish date by **using three different methods**: a) a range operator, b) a comparison operator, and c) a pattern matching operator.