

## **CSCE4350 SQL Query Assignment**

**Date Issued: 9/20/2012**

**Due Date: 10/09/2012**

**Total Score: 100 points**

Before beginning, you will need to download the file tables.sql from the class website and source the file in MySQL to create your database.

Next, create the file lastname\_firstname\_MySQL.sql (where lastname and firstname are your names) and place all queries in the file. Each query should have a comment with the query number, e.g Part A.1. Make sure your file runs before submitting it because the TA will check it against a similar database.

### **Part A:**

1. Find the table names of all existing tables created by users
2. Find the schema of the borrower table

### **Part B**

1. List the branch names of branches that have a loan
2. List all customers
3. Find loan number, branch name, and the loan amount multiplied by 10 of each loan
4. Find all loan number for loans made at the Downtown branch with loan amounts greater than \$1,000.
5. Find the loan number of those loans with loan amounts between \$200 and \$1500
6. Find the name, loan number and loan amount of all customers having a loan at the Downtown branch.
7. Find the names of all branches that have greater assets than some branch located in Brooklyn.
8. Find the names of all customers whose street includes the substring Alma.
9. List in alphabetic order the names of all customers having a loan in Perryridge branch
10. Find the names of all customers who have a loan, an account, or both, order the names in descending order
11. Find the names of all customers who have both a loan and an account.
12. Find the names of all customers who have an account but no loan.
13. Find the average account balance at the Brighton branch.
14. Find the number of tuples in the borrower relation.
15. Find the number of depositors in the bank.
16. Find the number of depositors for each branch.
17. Find the names of all branches where the average account balance is more than \$500.
18. Find all loan number that appears in the loan relation with null values for amount.
19. Find the names of all branches that have greater assets than all branches located in Horseneck.
20. Find the names of all customers who have an account at all branches located in Horseneck.
21. Find the names of all customers who have at most one account at Brooklyn city.
22. Set the assets of Mianus branch to 1,000,000

23. Increase the balances of the accounts in Perryridge branch by 1%, in Brooklyn by 5%, and others by 10%

### **Part C**

1. Add a new attribute “customer\_ID” to table customer as an integer value.
2. Make the attribute “branch\_name” the primary key of table branch
3. Add a constraint that the “county” attribute of the customer table that has to be unique; the constraint is called “uniquecounty”
4. Change the domain of the “customer\_name” attribute of the customer table to char(30)
5. Make the “branch\_city” of the branch table have a default value of ‘Denton’
6. Add a constraint to the table branch so that the asset is greater than or equal to 0; the constraint is called “minAsset”
7. Drop the primary key of table branch

### **Submission instructions:**

- submit an executable SQL file, including all the SQL statements for the queries. For each query, please include the query number and its corresponding English query as a comment (use -- to commend a line in SQL). Submit answers by the due date using the 'project' program. The class code is 4350s001 project banking.