CS579
Class Project – Part 3

Due: 11/9

This assignment is a practice of a (part of) typical physical database design. Perform the following tasks using the attached database schema.

1. Write a create table statement for each relation.

2. Write insert statements to insert tuples into all tables as follows. You need to decide attribute values of all tuples and you must make sure that all integrity constraints are satisfied.

   (a). Insert 3 tuples in the Customer table.
   (b). Insert 5 tuples in the Paper_Order table.
   (c). Insert at least 10 tuples in the Branch table.
   (d). Insert at least 10 tuples in the Suborder table.
   (e). Insert 5 tuples in the Employee table. Possible values of the *Classification* attribute are {*assistant, associate, manager*}.
   (f). Insert at least 10 tuples in the Handles table.
   (g). Insert 4 tuples in the Paper table.
   (h). Insert at least 15 tuples in the Order_Item table.

3. Write following queries in SQL and issue them to your database. Then capture the screenshot of the query results and include them in your submission. Make sure that each of your queries returns at least one tuple (If necessary, you must insert some additional tuples).

   (a). Show the order number, the order date, and the amount of all orders issued by <your choice of customer name>.
   (b). Show the employee numbers and the names of all employees who handle at least two orders.
   (c). Show the branch numbers, the addresses, the phone numbers of all branches of <your choice of customer name>.
   (d). For each suborder that was shipped later than the required shipping date, show the order number, the suborder number, the required shipping date, the actual shipping date, the customer name, the branch number, and the name of the employee who handled the order.
   (e). Show the customer name, the branch number, the address, and the phone number of every branch which received papers during <your choice of month, such as January of 2021>.

Deliverables

You must submit the following files:

1. SQL files: Create the following three files. The first file must include all create table statements and it must be named *LastName_FirstName_tables.sql*, and the second file must include all insert statements and it must be named *LastName_FirstName_tuples.sql*. The third file must include all your queries and must be named *LastName_FirstName_queries.sql*. All your SQL statements must be syntactically correct and executable on MySQL (or your DBMS). I will execute each of your files as a whole (in other words, I will not execute individual statements one at a time). So, the statements in your files must be ordered properly. At the head of each file, make sure that you write your name as comments.
2. Query result file: This file must include screenshots of the above five queries. Name it *LastName_FirstName_query_result.sql*.

Then, combine all files into a single archive file, name it *LastName_FirstName_P3.zip* (or in any other archive file format), and upload it to the Blackboard.

Boston Papers Relational Database Schema Diagram
(Use this schema for Project Part 3)