EX.NO.8   07.10.2020

1.   *(Query Application for the books Database)* Using the swing concept and DB connectivity concept to define a complete query application for the books database. Provide the following predefined queries:

  a) Select all authors from the Authors table.

  b) Select a specific author and list all books for that author. Include each book's title, year and ISBN. Order the information alphabetically by the author's last name then by first name.

  c) Select a specific title and list all authors for that title. Order the authors alphabetically by last name then by first name.

  d) Provide any other queries you feel are appropriate.

   Display a JComboBox with appropriate names for each predefined query. Also allow users to supply their own queries.

2.   *(Data-Manipulation Application for the books Database)* Define a data-manipulation application for the books database. The user should be able to edit existing data and add new data to the database (obeying referential and entity integrity constraints). Allow the user to edit the database in the following ways:

  a) Add a new author.

  b) Edit the existing information for an author.

  c) Add a new title for an author. (Remember that the book must have an entry in the AuthorISBN table.).

  d) Add a new entry in the AuthorISBN table to link authors with titles.

3. *(Employee Database) A*n employee-payroll hierarchy to calculate
   each employee's payroll. In this exercise, we provide a database of employees that corresponds to the employee-payroll hierarchy. (A SQL script to create the employees database is provided with the examples for this chapter (refer your text book)
   Write an application that allows the user to:
   a) Add employees to the employee table.
   b) Add payroll information to the appropriate table for each new employee. For example,
   for a salaried employee add the payroll information to the salariedEmployees table.
   Figure 24.33 is the entity-relationship diagram for the employees database.

4. *(Employee Database Query Application)* Modify Exercise 3 to provide a JComboBox and a JTextArea to allow the user to perform a query that is either selected from the JComboBox or defined in the JTextArea.
   Sample predefined queries are:
   a) Select all employees working in Department SALES.
   b) Select hourly employees working over 30 hours.
   c) Select all commission employees in descending order of the commission rate.