

CSE 4508 – RDBMS Programming Lab

Lab 4

Instructor: Md. Mohsinul Kabir

Materials: Prof. Dr. Abu Raihan Mostofa Kamal

Bangladesh Government wants to create its national database for the various purposes. The most essential information Government is interested to maintain are (but not limited to) such as:

A unique Citizen ID, Citizen Name, Date of Birth, Permanent Address and Occupation.

Address should be handled separately. Create its own table and store information such as division (such as Khulna or Dhaka) and district (such as Dhaka or Gazipur). Ensure that this table is connected to the main table via keys (Hint: Citizen ID)

Occupation should be handled separately as well. It should have a “general” field with options such as “Teacher” and a “specific” field with values such as “School” or “University” for the general profession of Teacher. Similarly, if the general profession is “Engineer”, specific values could be “CSE” or “Mechanical”. Store salary information as well. Ensure that the table is similarly connected to the main table via keys. (Hint: Citizen ID)

Task A:

1. First implement the above system in SQL.
2. Insert some data in all relevant tables created. (at least 10 entries)
3. Answer the following (should involve Join operations and subqueries):
 - Display the name, citizen ID, and salary of the top 5 highest paid individuals in the database
 - Display the name, date of birth, district and division of all individuals whose salary is greater than the average salary of school teachers
 - Count the number of such people (the ones described in the immediately previous query) who are from Dhaka (Hint: another level of subquery)

Task B:

1. Show with appropriate example the use of the following built-in functions:
CONCAT, INITCAP, INSTR, LOWER, UPPER, LENGTH, L/R PAD, L/R TRIM, SUBSTR, COUNT