DBMS

Exercise – 5   Total Points: 10

1. Consider the following employee database.

   employee (ID, emp_name, age, street, city)
   works (ID, company_name, salary)
   company (company_name, city)

   and reuse the employee database tables you created in Exercise-4.

2. Practice all the SQL commands discussed/demonstrated in the "U3_T2_Introduction to SQL"
   slides (from Slide number 33, "Set Operations - continued") on this database. (2 points)
   Notice that you should have tried all the concepts that are being discussed in the slides, with
   your own modifications, rather than just copying and pasting the commands.
   NB! Have screenshots for all the SQL commands tried
   For every concept not demonstrated, there will be a deduction of 0.2 points.

3. Now in the created employee database, provide the SQL queries for the following.
   a. Find the ID and name of each employee who does not work for "University of
      Hyderabad". (1 point)
   b. Find the ID and name of each employee who earns at least as much as every
      employee in the database. (1 point)
   c. Assume that companies may be located in several cities. Find the name of each
      company that is located in every city in which "SBI Bank" is located. (1 point)
   d. Find the name of the company that has the most employees (or companies, in the
      case where there is a tie for the most). (1 point)
   e. Find the name of each company whose employees earn a higher salary, on average,
      than the average salary at "University of Hyderabad". (1 point)
4. Now add a new relation to the database.

   manages(ID, manager_id)

5. Provide the SQL query for the following
   a. Give each manager of "SBI Bank" a 10 percent raise unless the salary becomes
      greater than Rs. 1000000; in such cases, give only a 3 percent raise. (1 point)
6. Now in the created employee database, provide the SQL queries for the following.
   NB! These queries need a bit more exploration of SQL queries on the internet.
   a. Think logically and add a new column to the employee table. Now update the rows
      in the table to also have some values for this new column. (1 point)
   b. Change the attribute name 'emp_name' to 'person_name' in the employee table. (1
      point)

Follow these guidelines while submitting the exercises

1. Put all your answers in a zip file with the file name being your studentid_EX5
2. Put a pdf file with the answers for the questions
3. Do not copy code/answers from internet. If you copy, please leave a comment with the URL from where you got the answers.
4. Organize all your answer files properly
5. Plagiarism will not be tolerated and dealt through the formal channels of the university