

CS355 Database Lab

Date: 17th Sep 2020

Deadline: 17th Sep 2020 (11:59 pm)

Assignment 5

Submission File Name: CS355_assign5.txt

In today's lab, perform the followings using MySQL database system.

You can login as **scot/tiger** and use your **dblab** database that you have already created for your previous assignments. You must have the following tables available in the **dblab** database.

- Suppliers(SID varchar (10), SName varchar (10), City varchar (10)
- Products (PID varchar(10), PName varchar(10), WarrantyPeriod smallint, DoM date)
- SP (SID varchar(10), PID varchar(10), Qty smallint) with SID and PID are defined as the foreign key constraint to Suppliers (SID) and Products (PID) respectively
- SP table basically provides which supplier has supplied which products and in how many quantities.

Task A)

Add the following attributes-

- Add DoB (Date of Birth as date datatype) attribute in suppliers relation
- Add DoS (Date of Supply as date datatype) attribute in SP relation
- Update these two attributes DoB and DoS with some relevant values.

Now create **sup_data.txt** file with some comma separated values in the current folder from where you are invoking MySQL utility. Here, the columns indicate SID, SName, City and DoB respectively. The file should contain atleast 10 relevant entries. Similarly, create **prod_data.txt** file with comma separated values in the current folder from where you are invoking MySQL utility. Here the columns indicate PID, PName, WarrantyPeriod and DoM.

Write all the necessary MySQL commands in the submission file for performing aforementioned task.

Task B)

For each of the following questions, write a MySQL query. You need to insert required tuples in the tables to check whether your queries are working or not.

#1) Find the details of the youngest supplier.

#2) Find the SID of the suppliers who are less than 30 years old.

#3) Show the average age of the suppliers from each city.

#4) Find the name of the suppliers who have supplied products in the year 2020.

#5) Find the name of the suppliers who have supplied products after 2019-08-15.

#6) Find the name of the most recently supplied product

#7) Find the name of the suppliers who have supplied atleast two products and one product is supplied within 30 days of supply of previous product.

#8) Find the products which are not sold within 1 year of date of manufacture

#9) Find the PID, WarrantyPeriod, StarRating of each product. Here, StarRating is a derived attribute and is calculated as '*' if the warranty period is in between 0 and 9, '**' if the warranty period is in between 10 and 19, '***' if the warranty period is in between 20 and 29, and so on.

#10) Create a view to show the oldest SID of each city.

Now write all the MySQL queries that you have used to perform the aforementioned functionalities in **CS355_assign5.txt** file. You should mention your name and roll no at the top of this file.

Upload the file using the following link –

https://www.iitp.ac.in/~samrat/CS354_CS355/submission

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