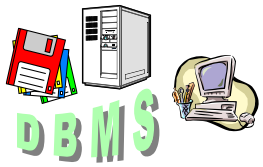

SQL Programming and DBMS

WORKSHOP

ON

SQL Data Definition Language and Data Modification using DML

Institute of Systems Science
National University of Singapore

EXERCISE

DATA DEFINITION LANGUAGE & DATA MANIPULATION LANGUAGE

Using Dafesty Database provided (as ms-access file), convert it to your local SQL Server database and try the following questions.

1. Create a Table called MemberCategories with the following fields

MemberCategory	nvarchar(2)
MemberCatDescription	nvarchar(200)

   None of the fields above can be null. Set the MemberCategory as the Primary key.

2. Add the following data into the MemberCategories Table:

MemberCategory	MemberCatDescription
A	Class A Members
B	Class B Members
C	Class C Members

3. Create a Table called GoodCustomers with the following fields:

CustomerName	nvarchar(50)
Address	nvarchar(65)
PhoneNumber	nvarchar(9)
MemberCategory	nvarchar(2)

   Only Customer Name and Phone Number is mandatory.
   Since there could be two customers having the same name, make CustomerName and Phone Number as a composite primary key.

   The MemberCategory should have a referential integrity to the MemberCategories Table so that only those categories that have been listed in MemberCategories Table could be entered.

4. Insert into GoodCustomer all records form Customer table with corresponding fields except Address, which is to be left Null. Only Customers having Member Category ‘A’ or ‘B’ are good customers hence the table should be inserted only those records from the Customers table.

5. Insert into GoodCustomers the following new customer.

   CustomerName = Tracy Tan
   PhoneNumber = 736572
   MemberCategory = 'B'

6. Insert into GoodCustomers table the following information for a new customer *Since all the columns are provided you may insert the record without specifying the column names.*

   CustomerName = Grace Leong
   Address = 15 Bukit Purmei Road, Singapore 0904'
   PhoneNumber = 278865
   MemberCategory = 'A'

7. Insert into GoodCustomers table the following information for a new customer *Since all the columns are provided you may insert the record without specifying the column names.*

   CustomerName = Lynn Lim
   Address = 15 Bukit Purmei Road, Singapore 0904'
   PhoneNumber = 278865
   MemberCategory = 'P'

   Does the command go through – It should not since member category 'P' is not defined in MemberCategories Table. (Violation of referential integrity)

8. Change the Address of Grace Leong so that the new address is '22 Bukit Purmei Road, Singapore 0904' in GoodCustomers table.

9. Change the Member Category to 'B' for customer whose Customer ID is 5108 in GoodCustomers table.

10. Remove Grace Leong from GoodCustomers table.

11. Remove customers with 'B' member category in GoodCustomers table.

12. Add column FaxNumber (nvarchar(25)) to GoodCustomers table.

13. Alter the column Address to nvarchar(80) in GoodCustomers table.

14. Add column ICNumber (nvarchar(10)) to GoodCustomers table.

15. Create a unique index ICIndex on table GoodCustomers bases on ICNumber. Notice that the column ICNumber have no values. Can you create the unique index successfully? Why?

16. Create an index on table GoodCustomers based on FaxNumber.

17. Drop the index created on FaxNumber.

18. Remove the column FaxNumber from GoodCustomer table.

19. Delete all records from GoodCustomers.

20. Drop the table GoodCustomers.