


Practicum Case	
COMP6799 COMP6799001 COMP6799016 COMP6799049 Database Technology	
Computer Science	E231-COMP6799-HG01-01
<i>Valid on Even Semester Year 2022/2023</i>	Revision 00

Learning Outcomes

- LO1 – define model data and information in the form of concept diagrams and physical diagrams and apply them to the database in a DBMS, both individually and in teamwork
- LO2 – explain the concepts of relational algebra, DDL, DML, transaction management on database and concurrency control

Topic

- Session 01 – Introduction to MySQL

Sub Topics

- Create and Drop Database
- Select Database
- Import and Export Database
- Create and Drop Table
- Data Types SQL
- Data Definition Language (DDL) Basic Syntax
- Data Manipulation Language (DML) Basic Syntax
- Data Control Language (DCL) Basic Syntax

Soal

Case

1. Create a database named “hehe_groceries”.

2. Create tables with the following description:

(REGEXP)

MsCustomer			
Field Name	Data Type	Length	Description
CustomerID	CHAR	5	Primary Key. CustomerID must starts with ‘CU’ and followed by 3 numbers (e.g. CU001, CU928, CU999, etc.)
CustomerName	VARCHAR	50	Cannot be empty.
CustomerGender	VARCHAR	10	Cannot be empty.
CustomerAddress	VARCHAR	50	Cannot be empty.
CustomerEmail	VARCHAR	50	Cannot be empty.
CustomerDOB	DATE	-	Cannot be empty.

MsEmployee			
Field Name	Data Type	Length	Description
EmployeeID	CHAR	5	Primary Key. EmployeeID must starts with ‘EM’ and followed by 3 numbers (e.g. EM001, EM187, EM999, etc.)
EmployeeName	VARCHAR	50	Cannot be empty.
EmployeeGender	VARCHAR	10	Cannot be empty.
EmployeeAddress	VARCHAR	50	Cannot be empty.

MsCategory			
Field Name	Data Type	Length	Description
CategoryID	CHAR	5	Primary Key. CategoryID must starts with ‘CT’ and followed by 3 numbers (e.g. CT001, CT235, CT999, etc.)
CategoryName	VARCHAR	50	Cannot be empty.

MsProduct			
Field Name	Data Type	Length	Description
ProductID	CHAR	5	Primary Key. FishID must starts with ' PR ' and followed by 3 numbers (e.g. PR001, PR193, PR999, etc.)
CategoryID	VARCHAR	5	Reference to CategoryID on MsCategory . If the referenced data is changed, then the data in MsProduct will also be changed . If the referenced data is removed, then the data in MsProduct will also be removed .
ProductName	VARCHAR	50	Cannot be empty.
ProductPrice	INT	-	Cannot be empty.

TransactionHeader			
Field Name	Data Type	Length	Description
TransactionID	CHAR	5	Primary Key. TransactionID must starts with ' TR ' and followed by 3 numbers (e.g. TR001, TR693, TR999, etc)
EmployeeID	CHAR	5	Reference to EmployeeID on MsEmployee . If the referenced data is changed, then the data in TransactionHeader will also be changed . If the referenced data is removed, then the data in TransactionHeader will also be removed .
CustomerID	CHAR	5	Reference to CustomerID on MsCustomer . If the referenced data is changed, then the data in TransactionHeader will also be changed . If the referenced data is removed, then the data in TransactionHeader will also be removed .
TransactionDate	DATE	-	Cannot be empty.

TransactionDetail			
Field Name	Data Type	Length	Description
TransactionID	CHAR	5	Primary Key. Reference to TransactionId on TransactionHeader . If the referenced data is changed, then the data in TransactionDetail will also be changed . If the referenced data is removed, then the data in TransactionDetail will also be deleted .
ProductID	CHAR	5	Primary Key. Reference to ProductID on MsProduct . If the referenced data is changed, then the data in TransactionDetail will also be changed . If the referenced data is removed, then the data in TransactionDetail will also be deleted .
Quantity	INT	-	Cannot be empty. Must be more than 0 .

MsBrand			
Field Name	Data Type	Length	Description
BrandID	CHAR	5	Primary Key. BrandID must starts with ' BR ' and followed by 3 numbers (e.g. BR001, BR693, BR999, etc).
BrandName	VARCHAR	50	Cannot be empty.

3. **Delete the MsBrand table.**

4. **Insert these data into MsCustomer table:**

Customer ID	Customer Name	Customer Gender	Customer Address	Customer Email	Customer DOB
CU001	Dirk Titterel	Male	74 Melvin Point	Dtitterel0@yellow pages.com	2003-10-29

5. Insert these data into **MsEmployee** table:

EmployeeID	EmployeeName	EmployeeGender	EmployeeAddress
EM001	Clem	Male	0975 Forest Dale Trail
EM002	Dene	Male	2 Grayhawk Parkway
EM003	Lethia	Female	905 Goodland Lane
EM004	Tyrone	Male	51745 Bowman Hill
EM005	Shanda	Male	848 New Castle Center

6. Display **all data** from “**MsEmployee**”.

EmployeeID	EmployeeName	EmployeeGender	EmployeeAddress
EM001	Clem	Male	0975 Forest Dale Trail
EM002	Dene	Male	2 Grayhawk Parkway
EM003	Lethia	Female	905 Goodland Lane
EM004	Tyrone	Male	51745 Bowman Hill
EM005	Shanda	Male	848 New Castle Center

7. Display **all data** for a **customer** whose name is “**Dirk Titterell**”
(**LIKE**)

CustomerID	CustomerName	CustomerGender	CustomerAddress	CustomerEmail	CustomerDOB
CU001	Dirk Titterell	Male	74 Melvin Point	dtitterell0@yellowpages.com	2003-10-29