



UTM
UNIVERSITI TEKNOLOGI MALAYSIA

SED2523 - 03

DATABASE SECTION 03

FACULTY OF COMPUTING

LAB EXERCISE 1 PART 1

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PART 1 : READING INFORMATION FROM A SCRIPT

1. **How many tables have been created using CREATE TABLE statements?**
10 tables have been created using CREATE TABLE statements.
2. **How many columns are created for the price history table?**
6 columns are created for the price history table.
3. **What statement is used to enforce the constraint that the category column of the items table must have a value?**
NOT NULL
4. **What is the name of the foreign key constraint between the customers and customer addresses tables?**
ctr_number
5. **What are the lowest and highest values that can be stored in the commission_rate column for the sales_representatives table?**
-99 to 99
6. **What are the lowest and highest values that can be stored in the price column for the price_history table?**
-99999.99 to 99999.99
7. **What are the 3 columns that make up the primary key for the price_history table?**
itm_number
start_date
start_time

PART 2 : UPDATING CONSTRAINTS

MODIFYING A COLUMN

1. DESCRIBE ORDERS
2. ALTER TABLE ORDERS
MODIFY `odr_date` DATE DEFAULT SYSDATE
3. DESCRIBE ORDERS

```
DESCRIBE ORDERS
```

TABLE ORDERS

Column	Null?	Type
ID	NOT NULL	VARCHAR2(9)
ODR_DATE	NOT NULL	DATE
ODR_TIME	NOT NULL	DATE
NUMBER_OF_UNITS	NOT NULL	NUMBER(2,0)
CTR_NUMBER	NOT NULL	VARCHAR2(6)

ADDING A CHECK CONSTRAINTS

1. DESCRIBE CUSTOMERS
2. ALTER TABLE CUSTOMERS
ADD CONSTRAINT `current_balance` CHECK (`current_balance` >= 0)
3. DESCRIBE CUSTOMERS

Constraint	Type	Condition	Related Constraint
CURRENT_BALANCE	Check	current_balance >= 0	-

ADDING A COLUMN

1. DESCRIBE CUSTOMERS
2. ALTER TABLE CUSTOMERS
ADD `mobile_number` VARCHAR (11)
3. DESCRIBE CUSTOMERS

```
DESCRIBE CUSTOMERS
```

TABLE CUSTOMERS

Column	Null?	Type
CTR_NUMBER	NOT NULL	VARCHAR2(6)
EMAIL	NOT NULL	VARCHAR2(50)
FIRST_NAME	NOT NULL	VARCHAR2(20)
LAST_NAME	NOT NULL	VARCHAR2(30)
PHONE_NUMBER	NOT NULL	VARCHAR2(11)
CURRENT_BALANCE	NOT NULL	NUMBER(6,2)
SRE_ID	-	VARCHAR2(4)
TEM_ID	-	VARCHAR2(4)
LOYALTY_CARD_NUMBER	-	VARCHAR2(6)
MOBILE_NUMBER	-	VARCHAR2(11)

DROPPING A COLUMN

1. DESCRIBE CUSTOMERS
2. ALTER TABLE CUSTOMERS
DROP COLUMN `mobile_number`
3. DESCRIBE CUSTOMERS

```
DESCRIBE CUSTOMERS
```

TABLE CUSTOMERS

Column	Null?	Type
CTR_NUMBER	NOT NULL	VARCHAR2(6)
EMAIL	NOT NULL	VARCHAR2(50)
FIRST_NAME	NOT NULL	VARCHAR2(20)
LAST_NAME	NOT NULL	VARCHAR2(30)
PHONE_NUMBER	NOT NULL	VARCHAR2(11)
CURRENT_BALANCE	NOT NULL	NUMBER(6,2)
SRE_ID	-	VARCHAR2(4)
TEM_ID	-	VARCHAR2(4)
LOYALTY_CARD_NUMBER	-	VARCHAR2(6)