UNIVERSITI TEKNOLOGI MALAYSIA (UTM), JOHOR BAHRU

SECD2523-03

DATABASE SECT 03

TITLE:

LAB EXERCISE 1

STUDENT'S NAME:

SERI NUR AYUNI BINTI SALIMI

A22EC0268

LECTURER'S NAME:

DR IZYAN IZZATI BINTI KAMSANI

DATE OF SUBMISSION:

Part 1: Reading information from a script

In this exercise you will use the "obl Sports.ddl" file to consolidate your knowledge of DDL.
Open the "obl Sports.ddl" in a text editor.

1. How many tables have been created using the CREATE TABLE statement?
    10 tables

2. How many columns are created for the price history table?
    6 columns

3. What statement is used to enforce the constraint that the category column of the items table must have a value?
    itm_number   VARCHAR2(10) 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?
    Lowest is 1 and highest is 99

6. What are the lowest and highest values that can be stored in the price column for the price_history table?
    Lowest is 00000.01 and highest is 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

Task 1 : Modifying a column

DESCRIBE orders

ALTER TABLE orders
MODIFY odr_date DATE DEFAULT SYSDATE;

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)

Task 2 : Adding a check constraint

DESCRIBE customers

ALTER TABLE customers
ADD CHECK (current_balance >= 0);

DESCRIBE customers

Constraints

Constraint	Type	Condition	Related Constraint	Related Table	Constraint Columns	On Delete	Status	Last Change	Invalid?
SYS_C00137173180	Check	"CTR_NUMBER" IS NOT NULL	-	-	-	-	ENABLED	7 minutes ago	-
SYS_C00137173181	Check	"EMAIL" IS NOT NULL	-	-	-	-	ENABLED	7 minutes ago	-
SYS_C00137173182	Check	"FIRST_NAME" IS NOT NULL	-	-	-	-	ENABLED	7 minutes ago	-
SYS_C00137173183	Check	"LAST_NAME" IS NOT NULL	-	-	-	-	ENABLED	7 minutes ago	-
SYS_C00137173184	Check	"PHONE_NUMBER" IS NOT NULL	-	-	-	-	ENABLED	7 minutes ago	-
SYS_C00137173185	Check	"CURRENT_BALANCE" IS NOT NULL	-	-	-	-	ENABLED	7 minutes ago	-
SYS_C00137173932	Check	current_balance >= 0	-	-	-	-	ENABLED	95 seconds ago	-
CUSTOMER_SALES_REP_FK	Foreign Key	-	SALES_REPRESENTATIVE_PK	SALES_REPRESENTATIVES	SRE_ID	NO ACTION	ENABLED	7 minutes ago	-
CUSTOMER_TEAM_FK	Foreign Key	-	TEAM_PK	TEAMS	TEM_ID	NO ACTION	ENABLED	7 minutes ago	-
CUSTOMER_PK	Primary Key	-	-	-	CUSTOMER_ID	-	ENABLED	7 minutes ago	-
CTR_EMAIL_UK	Unique Key	-	-	-	EMAIL	-	ENABLED	7 minutes ago	-
CTR_LCN_UK	Unique Key	-	-	-	LOYALTY_CARD_NUMBER	-	ENABLED	7 minutes ago	-

Task 3 : Adding a column

DESCRIBE customers

ALTER TABLE customers
ADD ctr_mobile NUMBER(11);

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)
CTR_MOBILE	-	NUMBER(11,0)

Task 4 : Dropping a column

DESCRIBE customers

ALTER TABLE customers
DROP COLUMN ctr_mobile;

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)