<u>Lab 1</u>

Part 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?

"NOT NULL" statement

4. What is the name of the foreign key constraint between the customers and customer addresses tables?

The name of the foreign key constraint is customer address customer fk.

5. What are the lowest and highest values that can be stored in the commission_rate column for the sales representatives table?

The lowest value is -99 and the highest value is 99.

6. What are the lowest and highest values that can be stored in the price column for the price history table?

The lowest value is -99999.99 while the highest value 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:

Modifying a column

1. Run the DESCRIBE command on the orders table to view its structure.

DESCRIBE orders

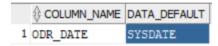
Name	Null?		Type	
ID	NOT	NULL	VARCHAR2 (9)	
ODR_DATE	NOT	NULL	DATE	
ODR_TIME	NOT	NULL	DATE	
NUMBER_OF_UNITS	NOT	NULL	NUMBER (2)	
CTR NUMBER	NOT	NULL	VARCHAR2 (6)	

2. Task: Add a default constraint that will use todays date to assign a value to the odr_date column of the orders table if no date is provided.

ALTER TABLE orders MODIFY ODR TIME DATE DEFAULT SYSDATE;

3. Run the DESCRIBE command again to verify the command was successful.

DESCRIBE orders



Adding a check constraint

1. Run the DESCRIBE command on the customers table to view its structure.

DESCRIBE customers

Name	Null?	Type	Type	
CTR_NUMBER	NOT NU	JLL VARCHAR2	(6)	
EMAIL	NOT NU	JLL VARCHAR2	(50)	
FIRST_NAME	NOT NU	JLL VARCHAR2	(20)	
LAST_NAME	NOT NU	JLL VARCHAR2	(30)	
PHONE_NUMBER	NOT NU	JLL VARCHAR2	(11)	
CURRENT_BALANCE	NOT NU	ULL NUMBER(6,	2)	
SRE_ID		VARCHAR2	(4)	
TEM_ID		VARCHAR2	(4)	
LOYALTY_CARD_NUMBE	ER	VARCHAR2	(6)	

2. Task: Add a check constraint that will not allow the customers current balance to go below zero.

ALTER TABLE customers ADD CONSTRAINT min_current_balance CHECK (current_balance >= 0)

3. Run the DESCRIBE command again to verify the command was successful.

DESCRIBE customers

- 4. A check constraint is not shown in the results of a describe command.
 - a. Go to the Object Browser
 - b. Select the customers table.
 - c. Click on the CONSTRAINTS tab.
 - d. You will see your constraint here.

7 MIN_CURR_BALANCE	Check	current_balance >= 0
--------------------	-------	----------------------

Adding a column

The client has decided that they would like a separate column for the customer's mobile phone number. This is an optional column that will be required to store 11 digits.

1. Run the DESCRIBE command on the customers table to view its structure.

DESCRIBE customers

Name	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)

2. Task: Add column that will satisfy the clients requirements

ALTER TABLE customers ADD cust phone num VARCHAR2(11);

3. Run the DESCRIBE command on the customers table to view its structure.

DESCRIBE customers

Name	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)	
CUST_PHONE_NUM			VARCHAR2(11)	

Dropping a column

The client has decided that they don't need the mobile number column as most customers only provide a single contact number and that is already catered for with the existing phone_number column.

1. Run the DESCRIBE command on the customers table to view its structure.

DESCRIBE customers

Name	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)
CUST_PHONE_NUM			VARCHAR2 (11)

2. Task: Drop the column that was created to store the mobile phone number.

ALTER TABLE customers DROP (cust_phone_num)

3. Run the DESCRIBE command on the customers table to view its structure.

DESCRIBE customers

Name	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)	