<u>Lab 1</u>

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Section 6 Lesson 3 Exercise : Data Definition Language

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?

NOT NULL

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

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?

Highest value is 99

Lowest value is -99

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

Highest value is 99999.99

Lowest 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

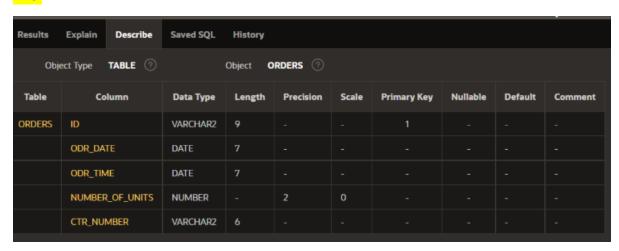
Part 2 : Updating Constraints

Log-in to APEX and go to the SQL commands environment

Modifying a column

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

ANS:

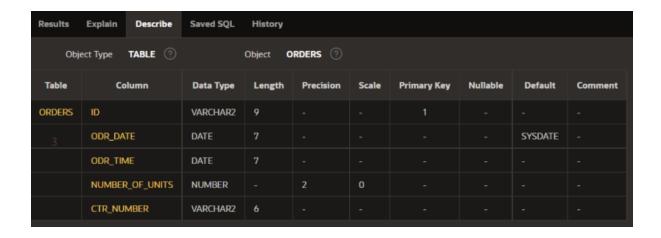


2. Task: Add a default constraint that will use todays date to assign a value to the odr_date column of the orders table if no date is provided.

ALTER TABLE orders

MODIFY odr_date DATE DEFAULT SYSDATE;

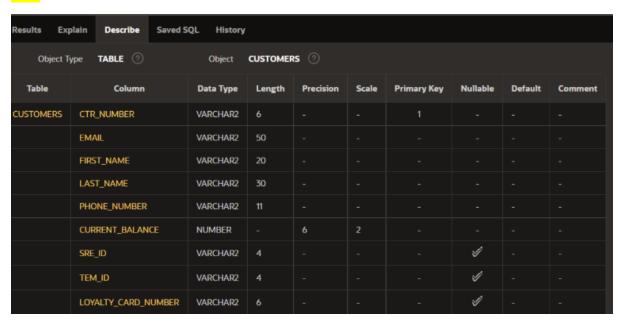
3. Run the DESCRIBE command again to verify the command was successful.



Adding a check constraint

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

ANS:



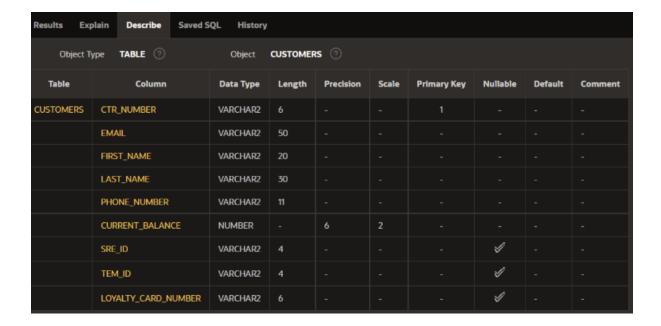
2. Task: Add a check constraint that will not allow the customers current balance to go below zero.

ALTER TABLE customers

ADD CONSTRAINT min current balance

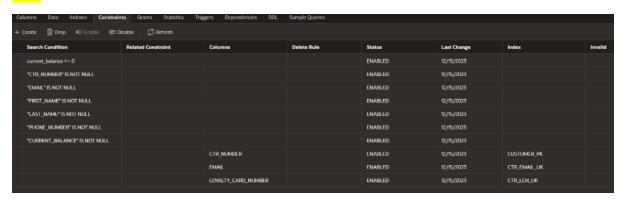
CHECK (current_balance >=0)

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



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

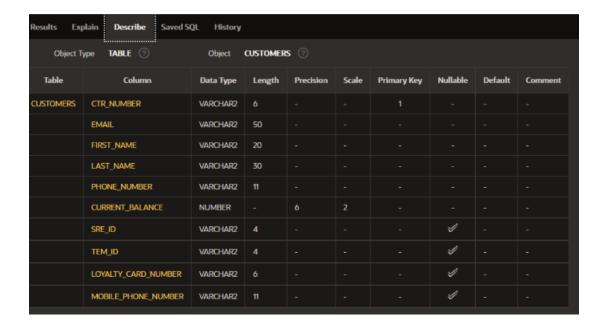
ANS:



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.

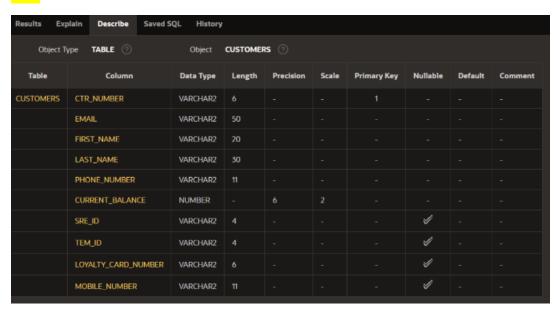


2. Task: Add column that will satisfy the clients requirements

ALTER TABLE customers

ADD mobile_number VARCHAR2(11);

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

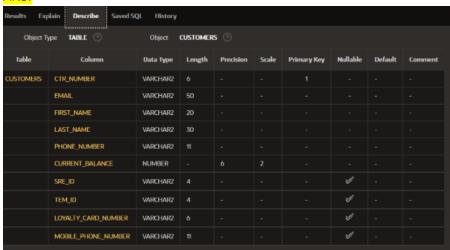


Dropping a column

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.

ANS:



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

ALTER TABLE customers

DROP (mobile_number)

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

Results Exp	olain Describe Saved S	QL History							
Object Type TABLE ? Object CUSTOMERS ?									
Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
CUSTOMERS	CTR_NUMBER	VARCHAR2	6						
	EMAIL	VARCHAR2	50						
	FIRST_NAME	VARCHAR2	20						
	LAST_NAME	VARCHAR2	30						
	PHONE_NUMBER	VARCHAR2	11						
	CURRENT_BALANCE	NUMBER		6	2				
	SRE_ID	VARCHAR2	4				V		
	TEM_ID	VARCHAR2	4				Ø.		
	LOYALTY_CARD_NUMBER	VARCHAR2	6				Ø		