DATABASE (SECD 2523-10)

LAB EXERCISE 1 (DDL)

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PART 1

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 foreign key constraint between the customers and customer_addresses tables is named 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 and highest values that can be stored in the commission_rate column for the sales_representatives table are 0 and 99, respectively.

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

The lowest and highest values that can be stored in the commission_rate column for the sales_representatives table are 00000.00 and 99999.99 respectively.

7. What are the 3 columns that make up the primary key for the price_history table?
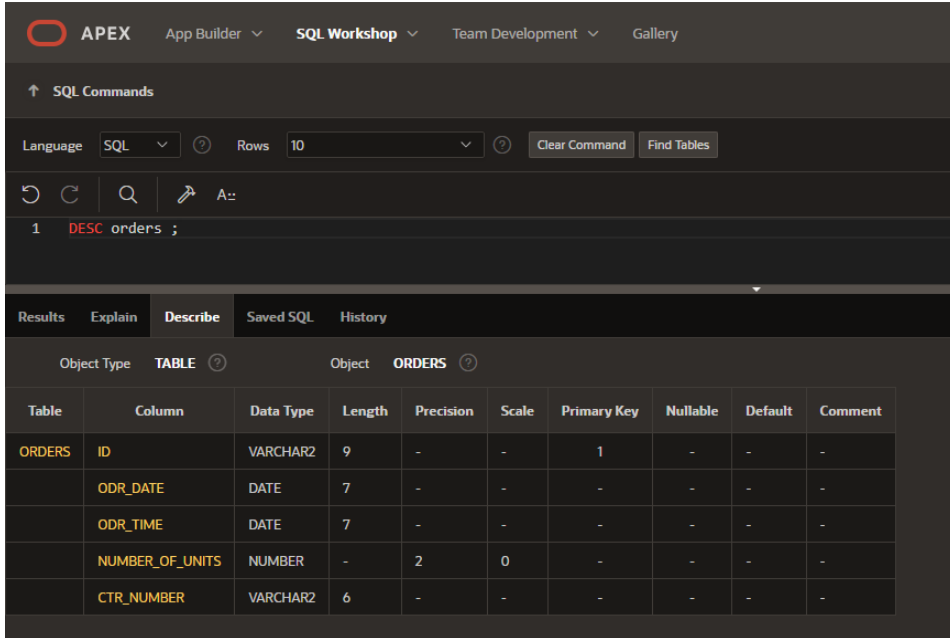
itm_number
start_date
start_time

PART B

Modifying a column

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

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

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

Adding a check constraint

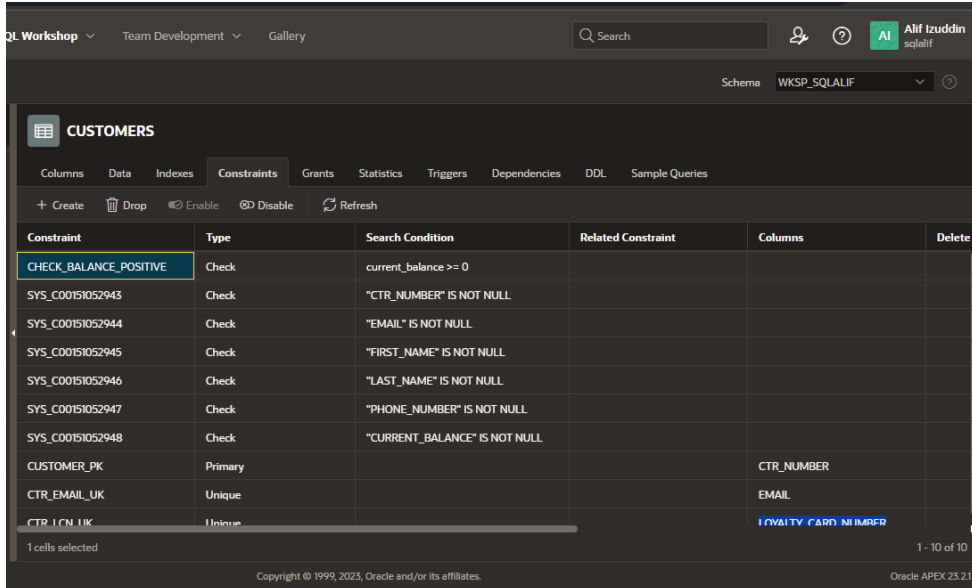1. Run the DESCRIBE command on the customers table to view its structure.

2. Task: Add a check constraint that will not allow the customers current balance to go below zero
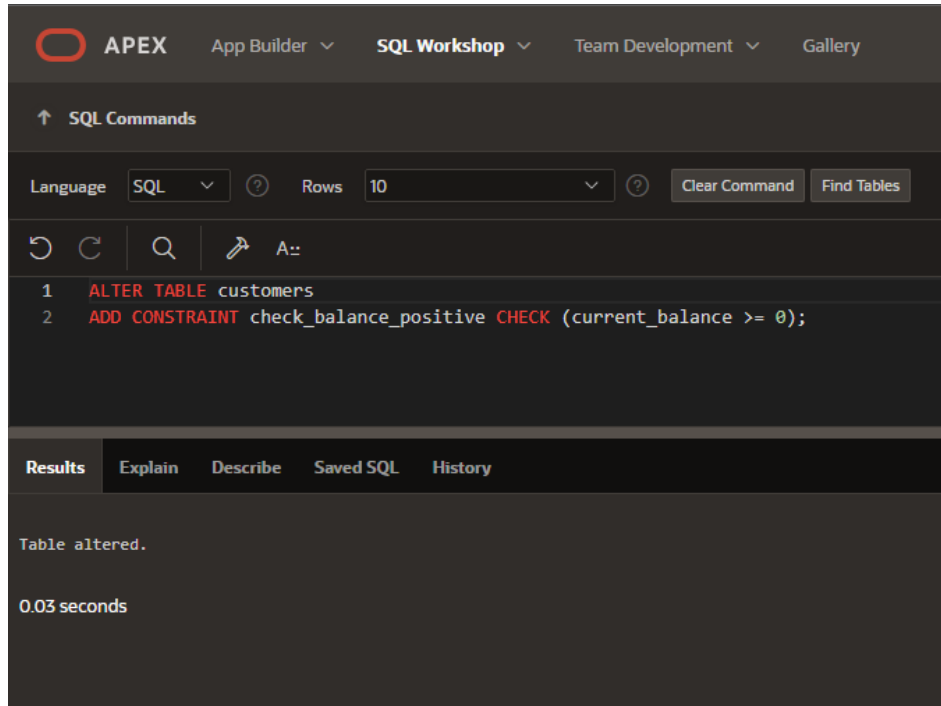
3. Run the DESCRIBE command again to verify the command was successful.
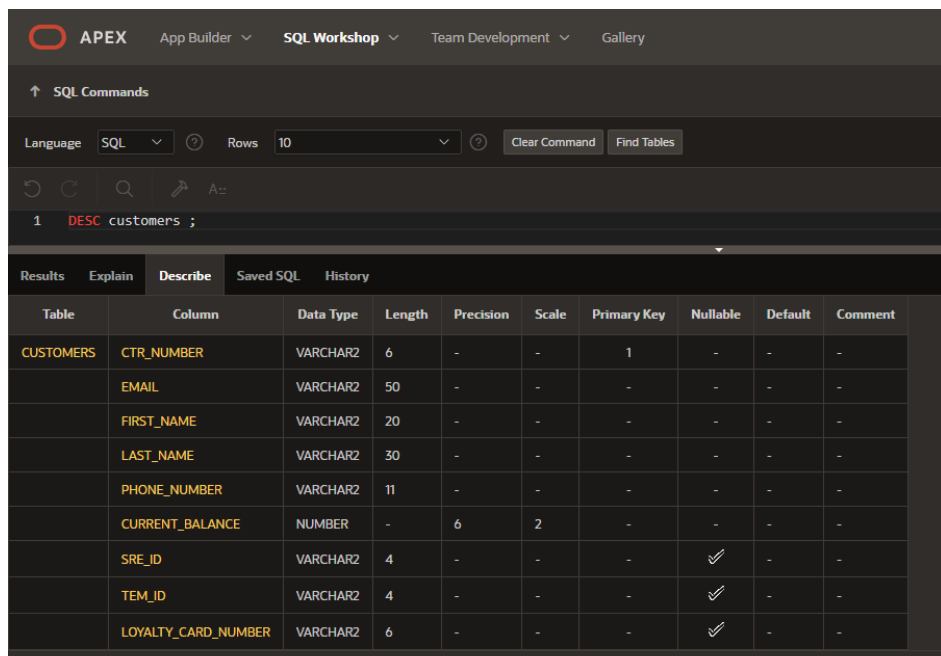
4. A check constraint is not shown in the results of a describe command.
    a. Go to the Object Browser
    b. Select the customers table.
    c. Click on the CONSTRAINTS tab.
    d. You will see your constraint here.
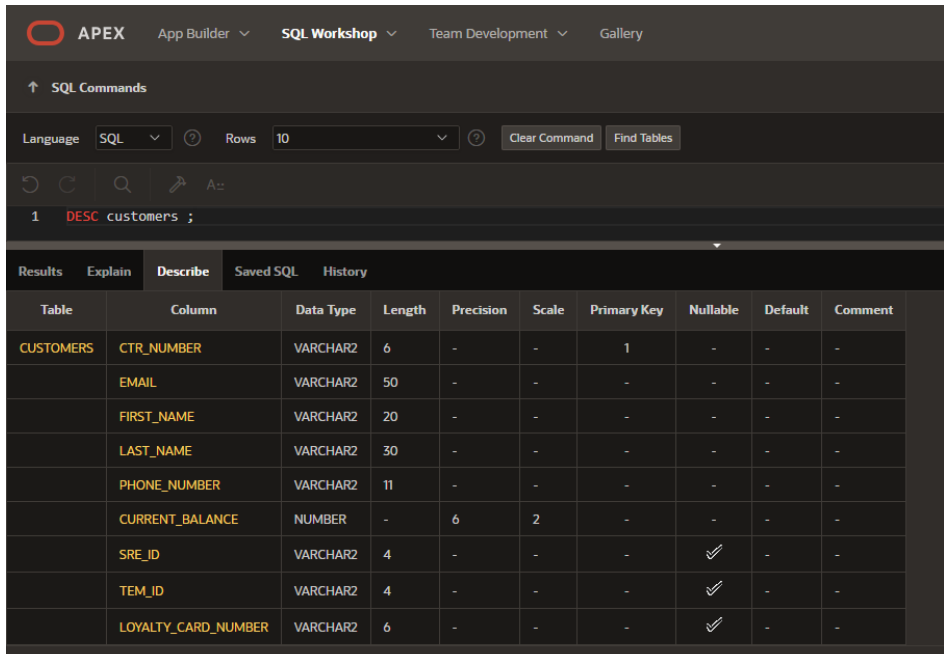
Constraint	Type	Search Condition	Related Constraint	Columns	Delete
CHECK_BALANCE_POSITIVE	Check	current_balance >= 0			
SYS_C00151052943	Check	"CTR_NUMBER" IS NOT NULL			
SYS_C00151052944	Check	"EMAIL" IS NOT NULL			
SYS_C00151052945	Check	"FIRST_NAME" IS NOT NULL			
SYS_C00151052946	Check	"LAST_NAME" IS NOT NULL			
SYS_C00151052947	Check	"PHONE_NUMBER" IS NOT NULL			
SYS_C00151052948	Check	"CURRENT_BALANCE" IS NOT NULL			
CUSTOMER_PK	Primary			CTR_NUMBER	
CTR_EMAIL_UK	Unique			EMAIL	
CTR_LCN_UK	Unique			LOYALTY_CARD_NUMBER	

1 cells selected   1 - 10 of 10

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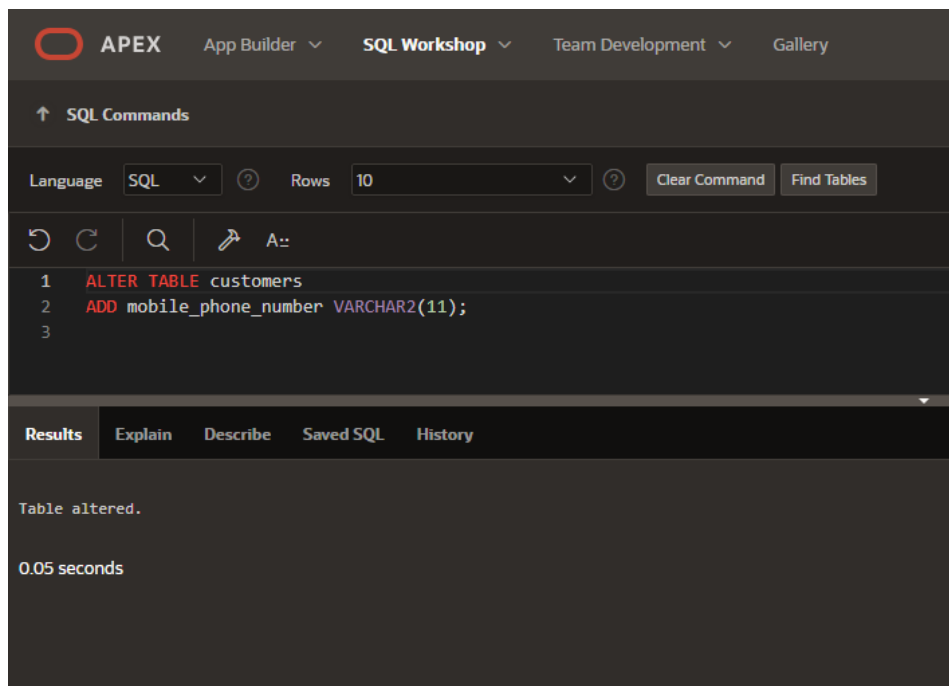
1. Run the DESCRIBE command on the customers table to view its structure.

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

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.

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

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