UTM

UNIVERSITI TEKNOLOGI MALAYSIA

LAB 1 DDL

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SUBJECT/CODE:DATABASE/SECD2523
SECTION:01

Answer:

Section 6 Lesson 3 Exercise : Data Definition Language

Use DDL to build and maintain database tables (S6L3 Objective 3)
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?

ctr_number

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

Minimum:1
Maximum:2

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

Significant value(M)=7
Exponent value (D)=2

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

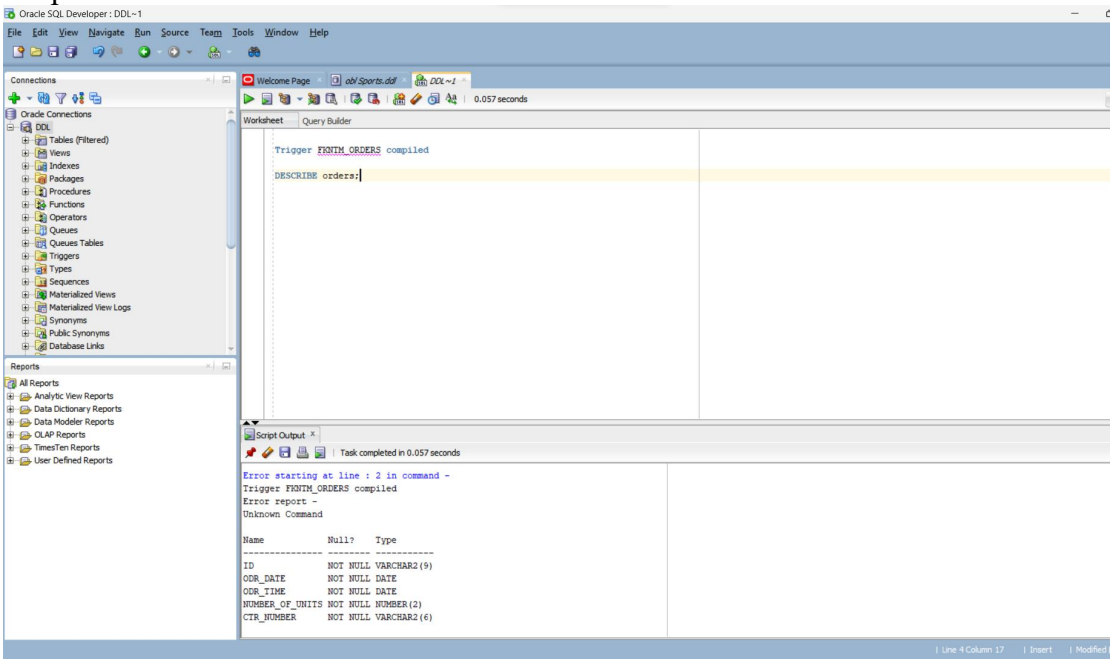
itm_number, start_date, start_time

Part 2:

Log-in to APEX and go to the SQL commands environment
Modifying a column

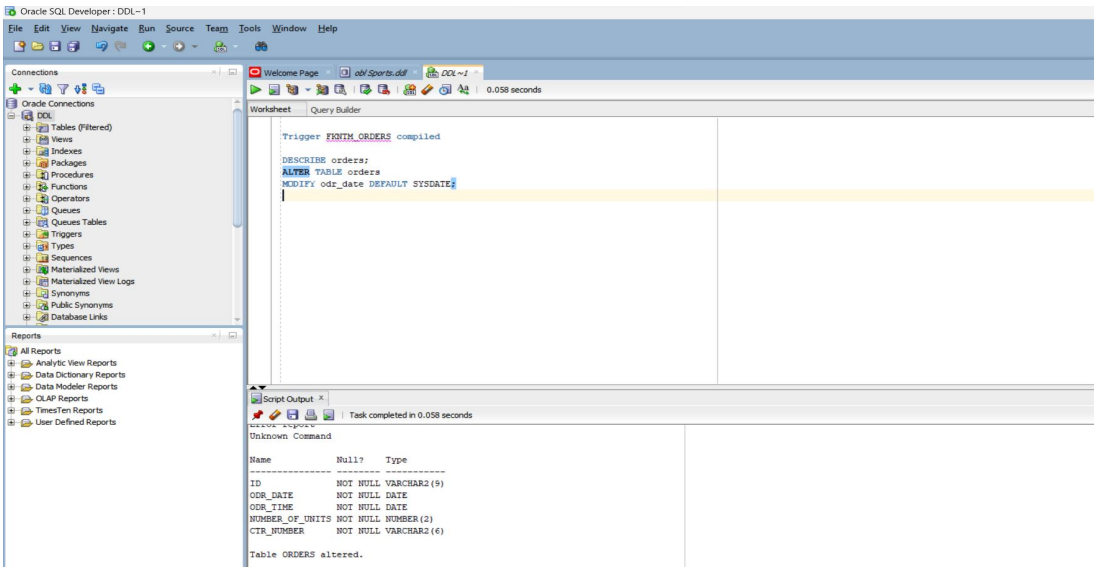
1. Run the DESCRIBE command on the orders table to view its structure.

Command:***DESCRIBE orders;***
Output:



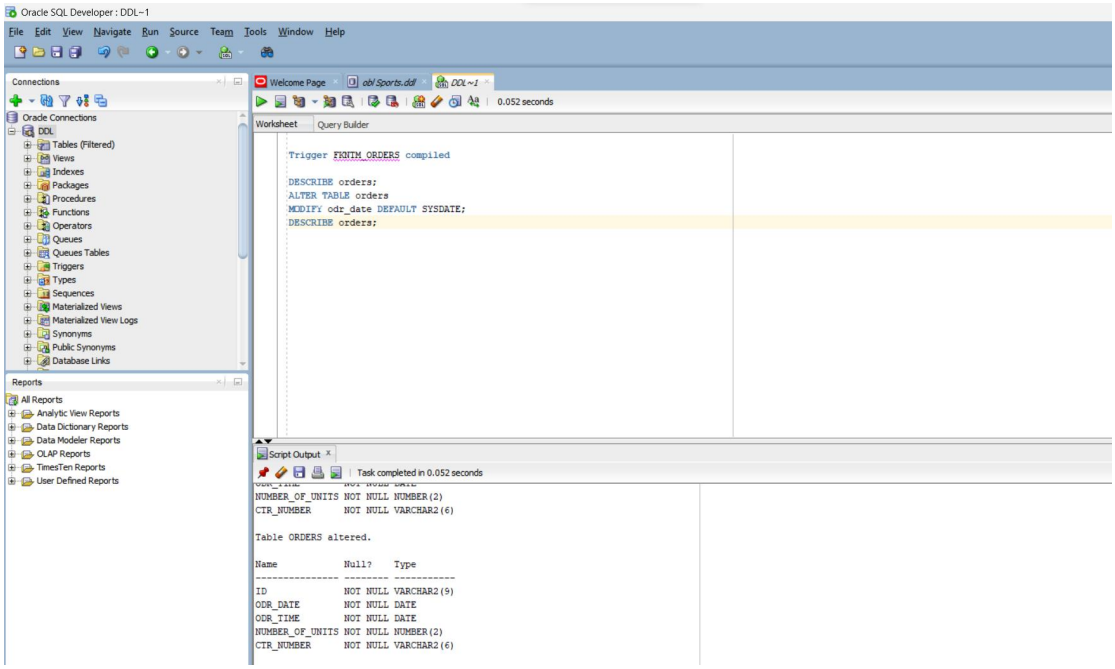
2. Task: Add a default constraint that will use todays date to assign a value to the odr_date column of the orders table if no date is provided.

Command:**ALTER TABLE orders MODIFY odr_date DEFAULT SYSDATE;**
Output:



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

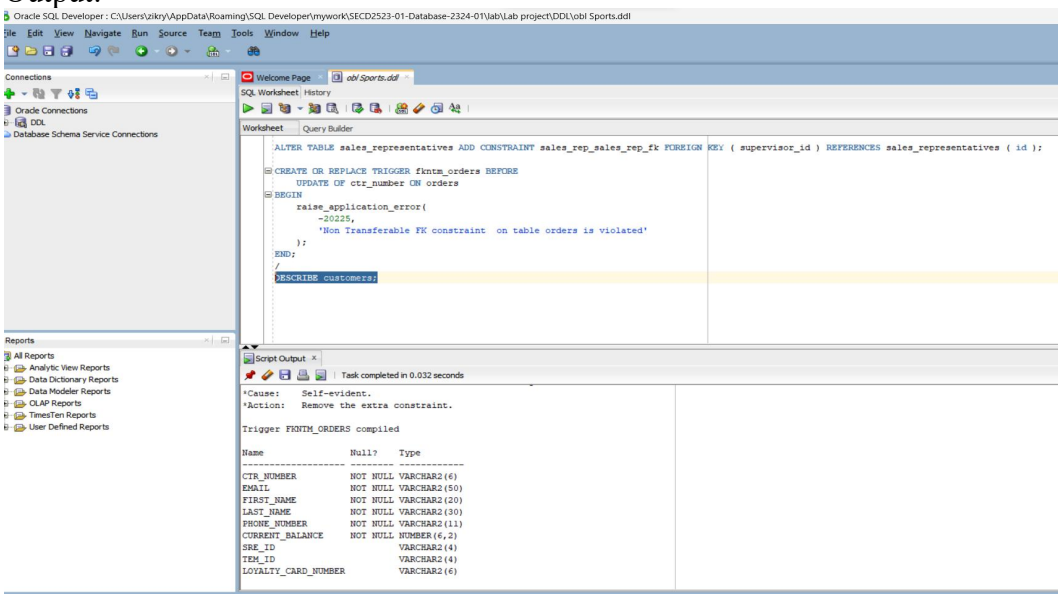
Command:**DESCRIBE orders;**
Output:



Adding a check constraint

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

Command:**DESCRIBE customers;**
Output:

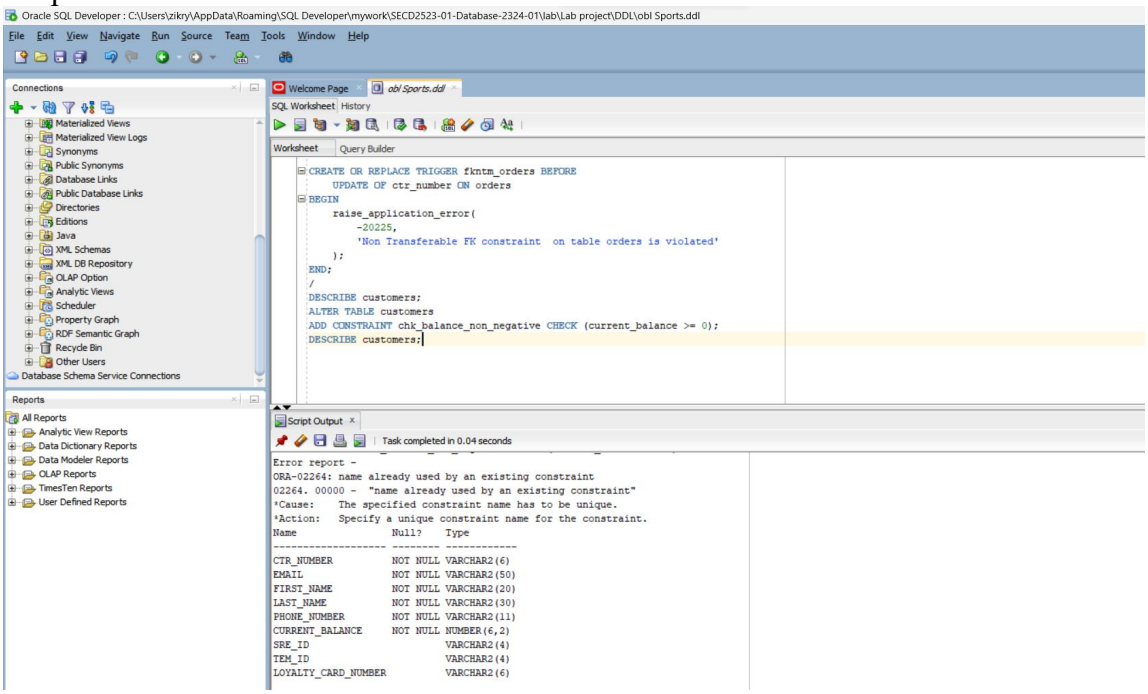


2. Task: Add a check constraint that will not allow the customers current balance to go below zero.
3. Run the DESCRIBE command again to verify the command was successful.

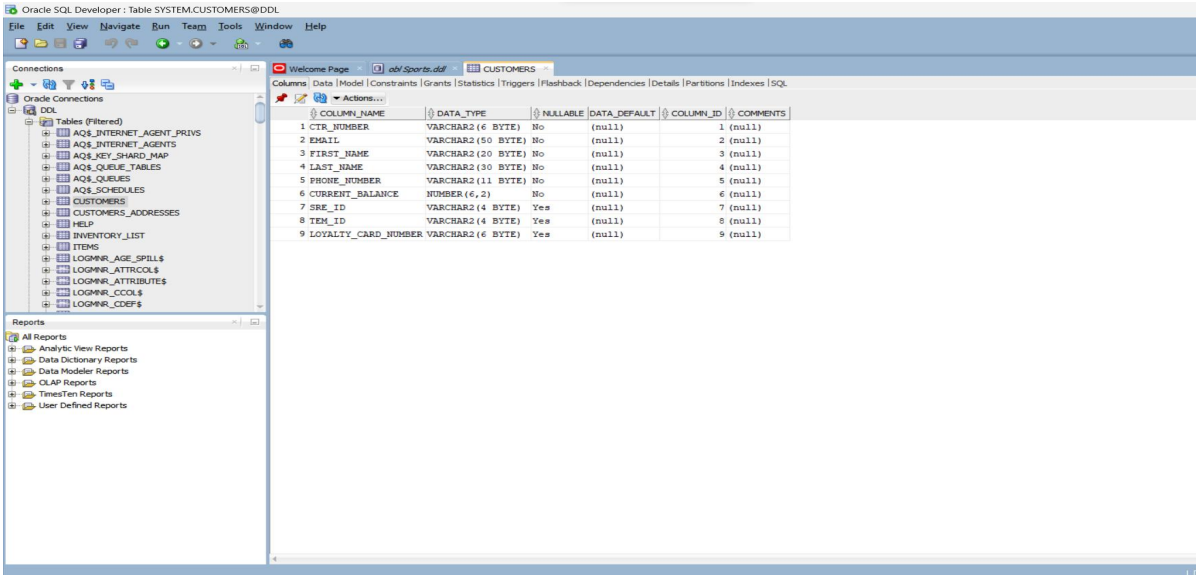
Command:***ALTER TABLE customers ADD CONSTRAINT check_balance_non_negative CHECK (current_balance >= 0);***

Command:***DESCRIBE customers;***

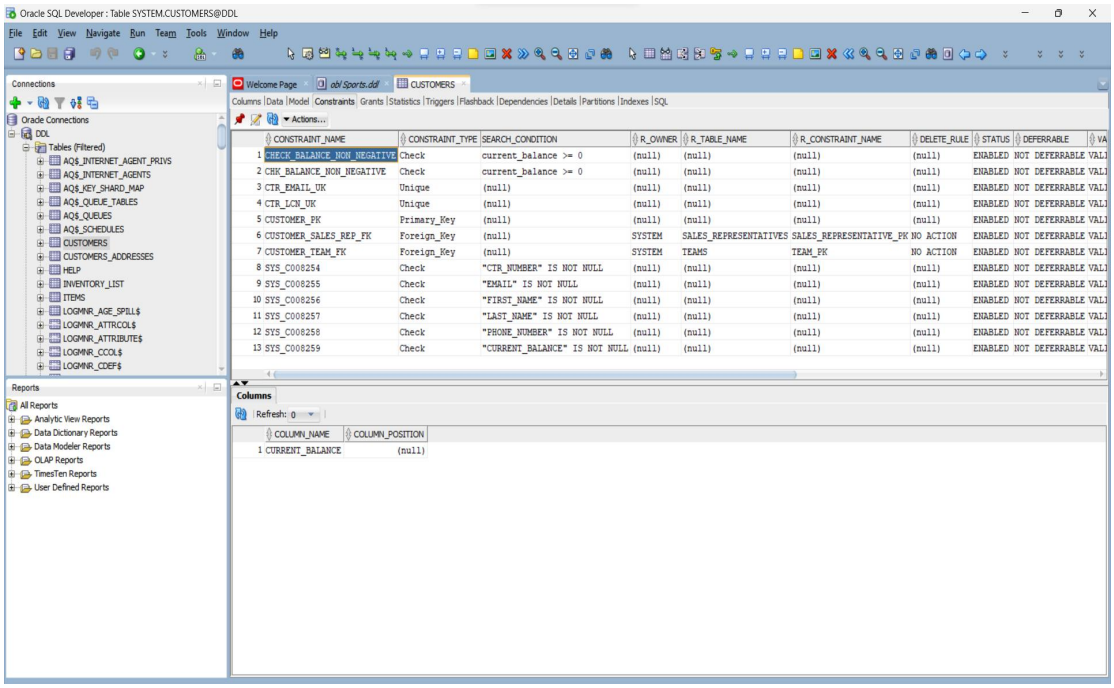
Output:



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.

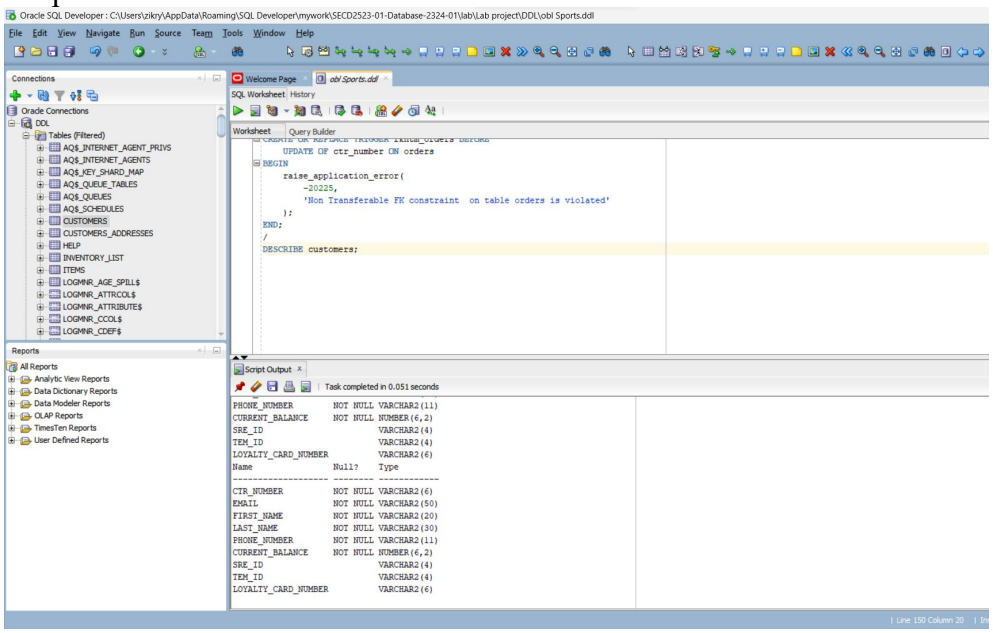


Adding a column

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.

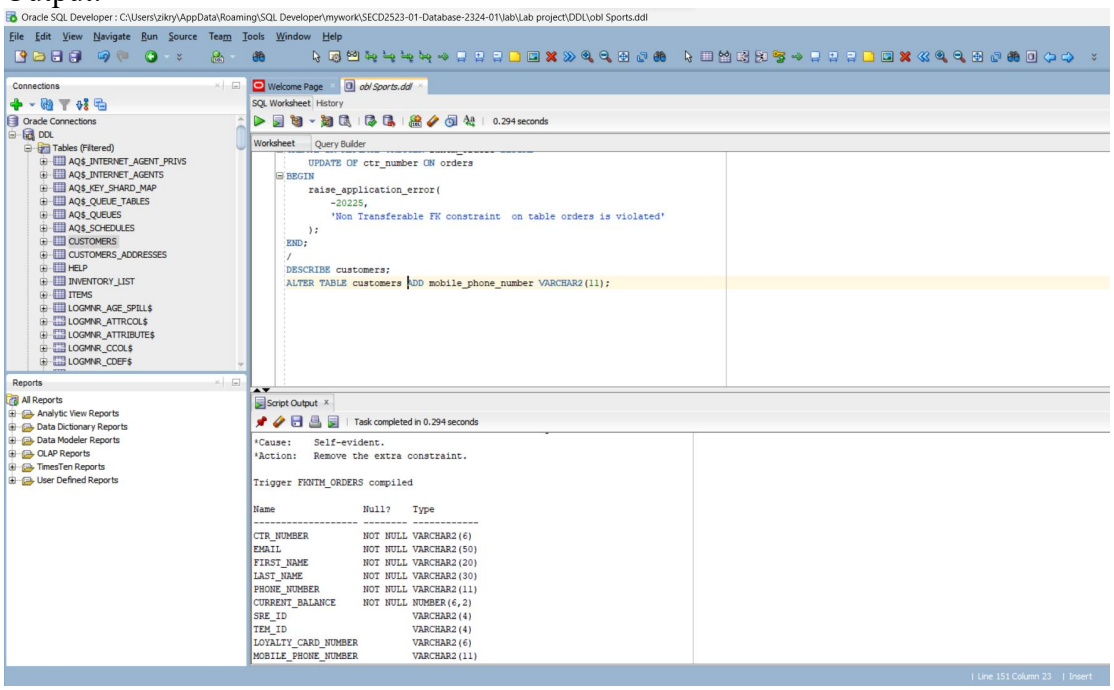
1. Run the DESCRIBE command on the customers table to view its structure.

Command:**DESCRIBE customers;**
Output:

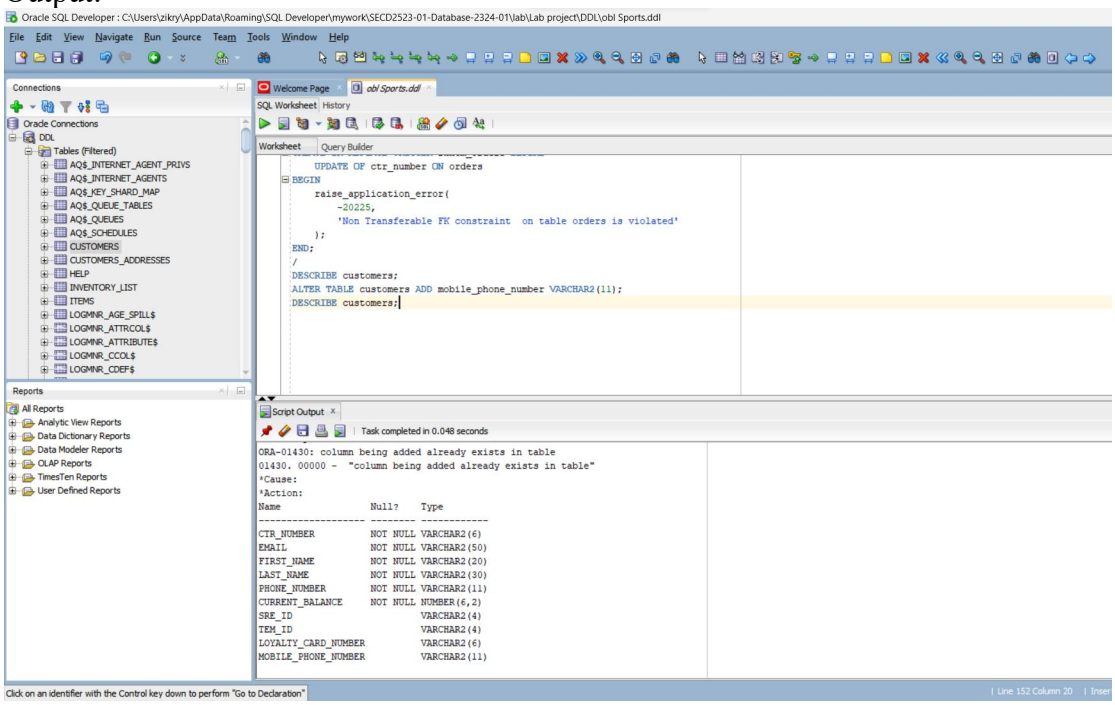


2. Task: Add column that will satisfy the clients requirements

Command:ALTER TABLE customers ADD mobile_phone_number VARCHAR2(11);
Output:



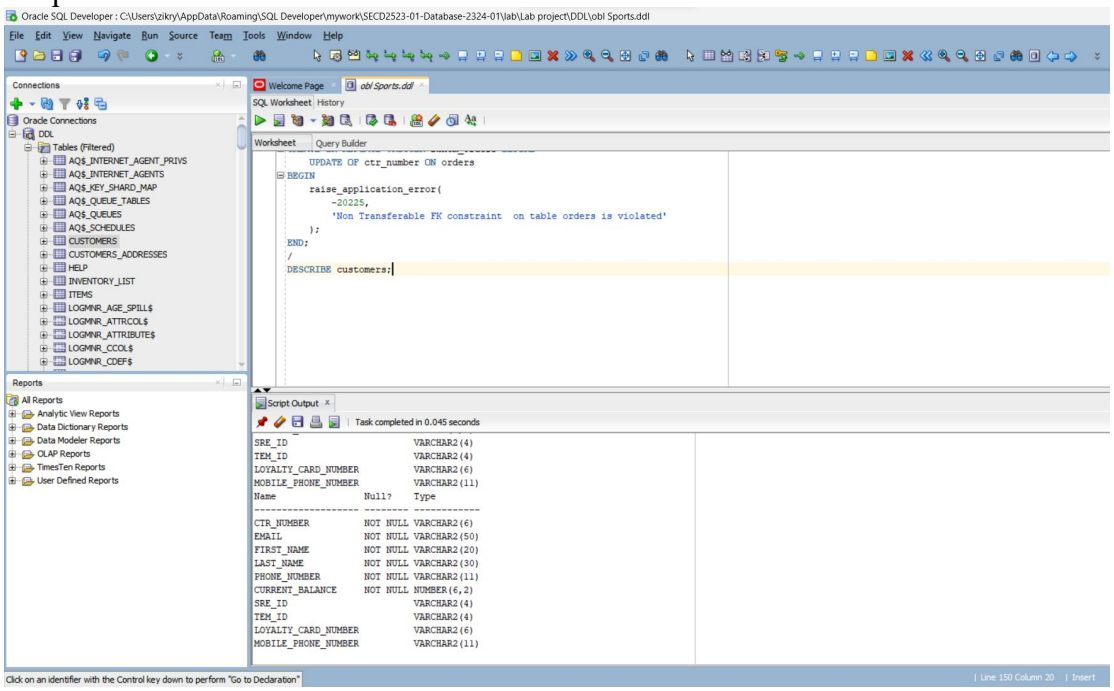
3. Run the DESCRIBE command on the customers table to view its structure.
Command:DESCRIBE customers;
Output:



Dropping a column

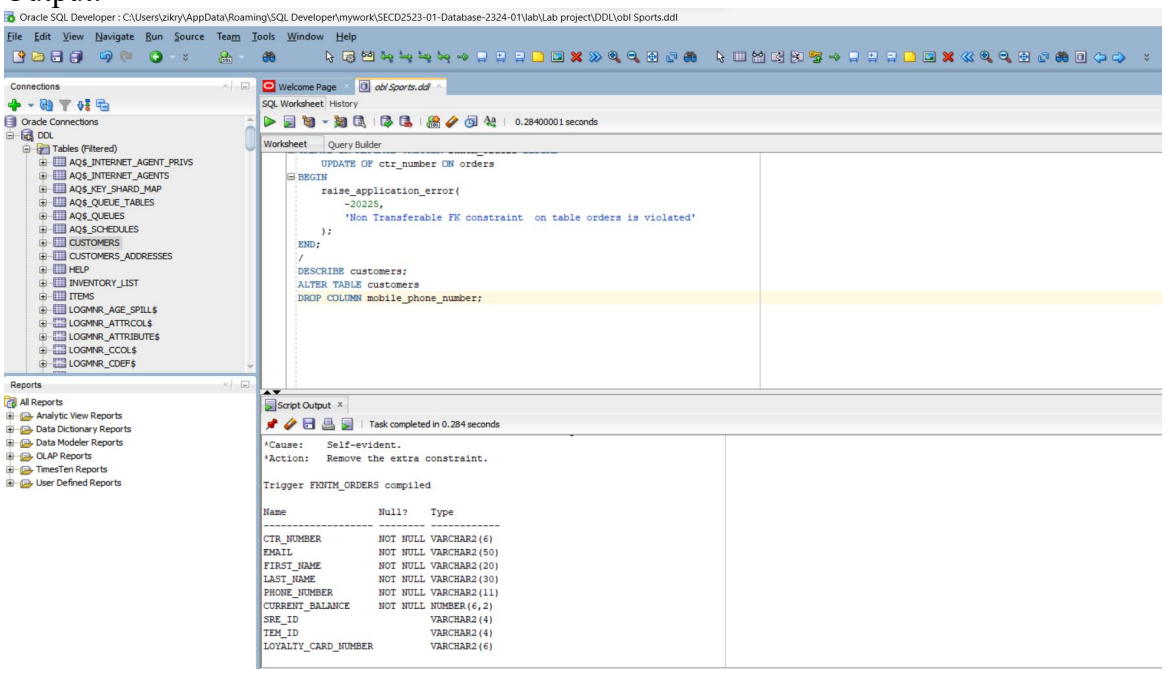
The client has decided that they don't need the mobile number column as most customers only provide a
single contact number and that is already catered for with the existing phone_number column.
1. Run the DESCRIBE command on the customers table to view its structure.

Command:**DESCRIBE customers;**
Output:



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

Command:**ALTER TABLE customers DROP COLUMN mobile_phone_number;**
Output:



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

Command:**DESCRIBE customers;**
Output: