



UTM
UNIVERSITI TEKNOLOGI MALAYSIA

SUBJECT CODE : SECD2523-01

SUBJECT NAME : DATABASE

SEMESTER : 1-2023/2024

TITLE : ORACLE SQL2 -DML1 (PART 1)

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Part 1 : Running a script to populate the tables.

You have to consider the order of the tables when populating them. A table that has a foreign key field cannot be populated before the related table with the primary key.

1. Use the table mapping document and list the order that you would use to populate the tables
2. Open the “sports data.sql” and look at the order the data is being added there, does your list match? This file can be found in the Section 6 Lesson 4 interaction (sports data.zip) and must first be extracted.
3. Run the “sports data.sql” script in APEX to populate your tables
4. Check that no errors occurred when you ran the script.

The screenshot displays the APEX SQL Workshop interface. At the top, the navigation bar includes 'APEX', 'App Builder', 'SQL Workshop', 'Team Development', and 'Gallery'. The user is logged in as 'farishah Alias' with the email 'databaseinformatics@graduate.utm.my'. The main area shows the execution results for the script 'sports data.sql', which is marked as 'Complete'. The view is set to 'Summary' and shows 15 rows. Below this, a table lists the execution details for each statement.

Number	Elapsed	Statement	Feedback	Rows
16	0.01	INSERT INTO price_history (start_date, start_time, price, it	1 row(s) inserted.	1
17	0.00	INSERT INTO price_history (start_date, start_time, price, it	1 row(s) inserted.	1
18	0.02	INSERT INTO sales_representatives (id, email, first_name, la	1 row(s) inserted.	1
19	0.00	INSERT INTO sales_representatives (id, email, first_name, la	1 row(s) inserted.	1
20	0.01	INSERT INTO sales_representatives (id, email, first_name, la	1 row(s) inserted.	1
21	0.01	INSERT INTO sales_rep_addresses (id, address_line_1, address	1 row(s) inserted.	1
22	0.00	INSERT INTO sales_rep_addresses (id, address_line_1, address	1 row(s) inserted.	1
23	0.00	INSERT INTO sales_rep_addresses (id, address_line_1, address	1 row(s) inserted.	1
24	0.01	INSERT INTO teams (id, name, number_of_players, discount) VA	1 row(s) inserted.	1
25	0.01	INSERT INTO teams (id, name, number_of_players, discount) VA	1 row(s) inserted.	1
26	0.00	INSERT INTO teams (id, name, number_of_players, discount) VA	1 row(s) inserted.	1
27	0.03	INSERT INTO customers (ctr_number, email, first_name, last_n	1 row(s) inserted.	1

Below the table, there is a 'Download' button and a summary of the execution results:

Statements Processed	Successful	With Errors
47	47	0

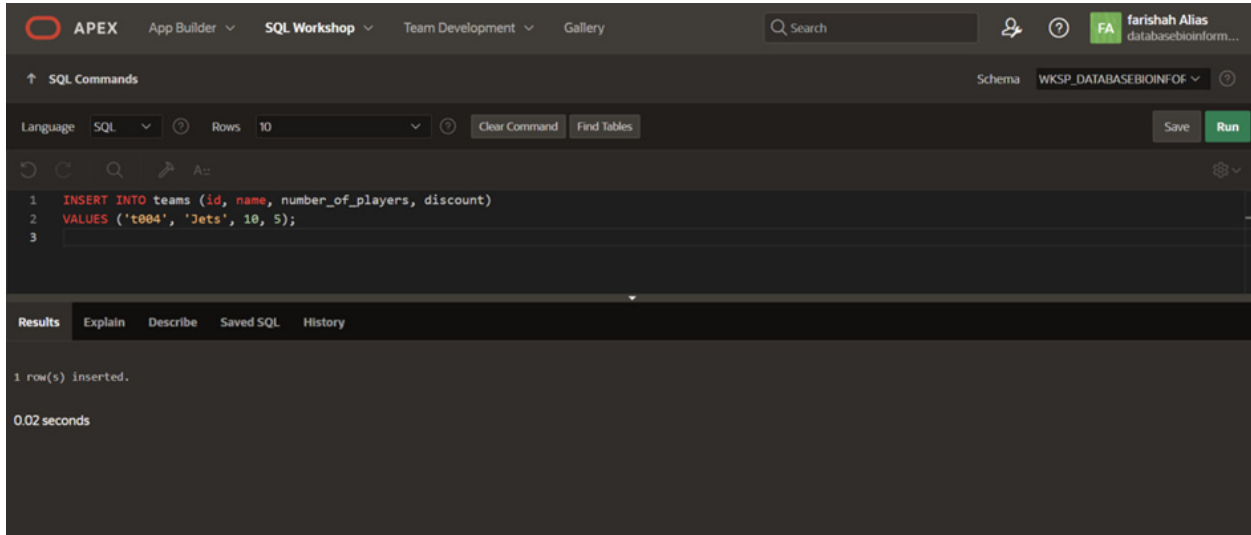
The footer of the interface includes the user's email 'farishahainzatu@graduate.utm.my', the website 'databaseinformatics', the copyright notice 'Copyright © 1999, 2023, Oracle and/or its affiliates.', and the version 'Oracle APEX 23.2.0-17'.

Part 2- Inserting rows to the system

1. Add a new team to the system

INSERT INTO teams (id, name, number_of_players, discount)

VALUES ('t004', 'Jets', 10, 5);

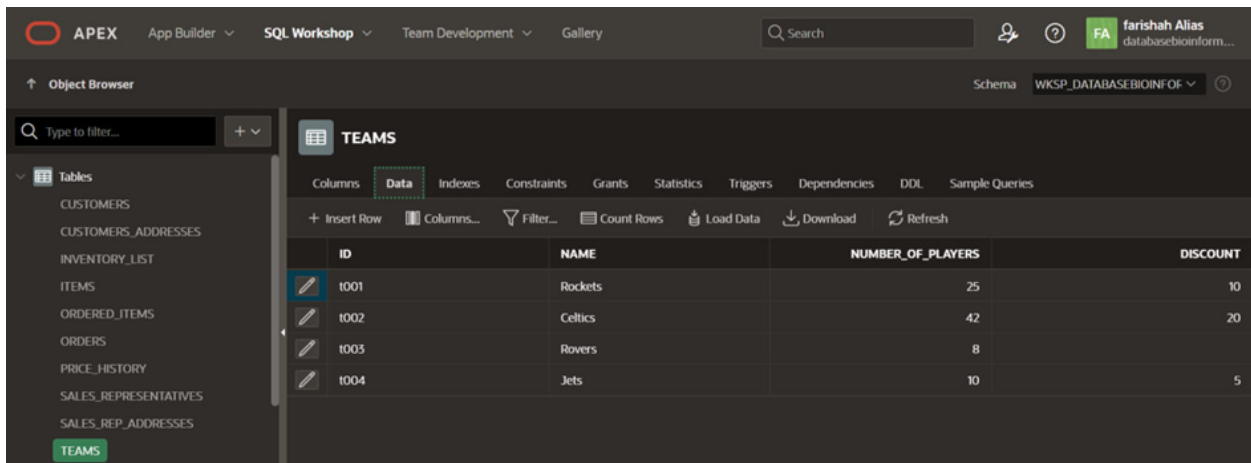


The screenshot shows the APEX SQL Workshop interface. The top navigation bar includes 'APEX', 'App Builder', 'SQL Workshop', 'Team Development', and 'Gallery'. A search bar and user profile 'farishah Alias' are on the right. The 'SQL Commands' tab is active, displaying the following SQL code:

```
1 INSERT INTO teams (id, name, number_of_players, discount)
2 VALUES ('t004', 'Jets', 10, 5);
3
```

Below the code editor, the 'Results' tab shows the execution outcome:

1 row(s) inserted.
0.02 seconds

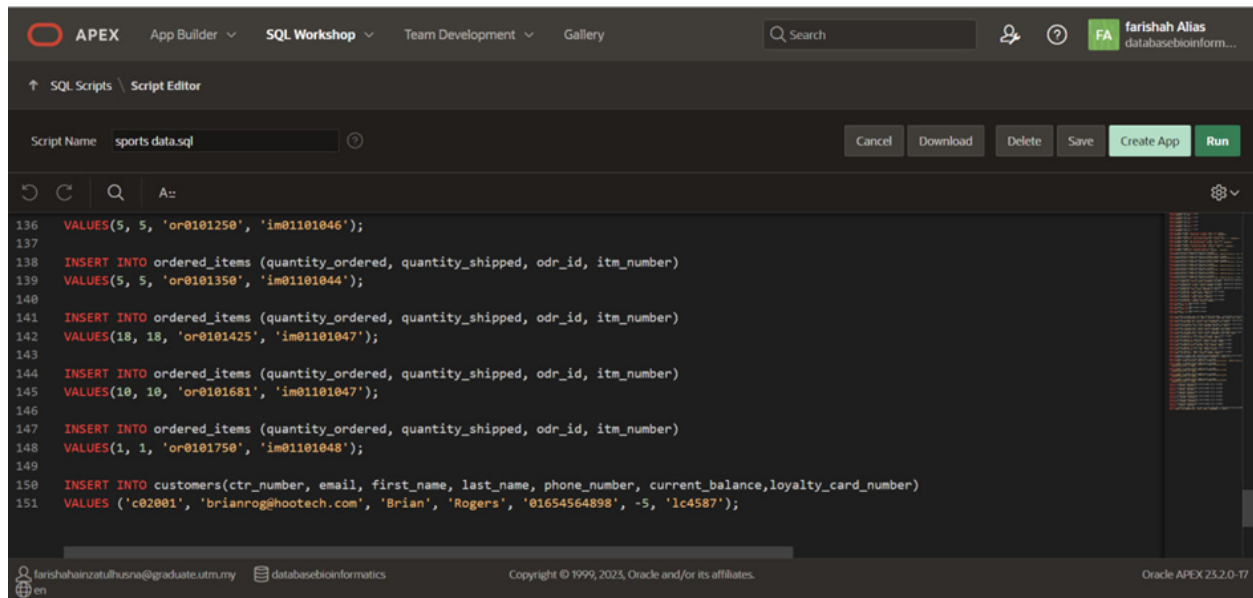


The screenshot shows the APEX SQL Workshop interface with the 'Object Browser' tab active. The 'TEAMS' table is selected, and the 'Data' tab is chosen. The table data is displayed as follows:

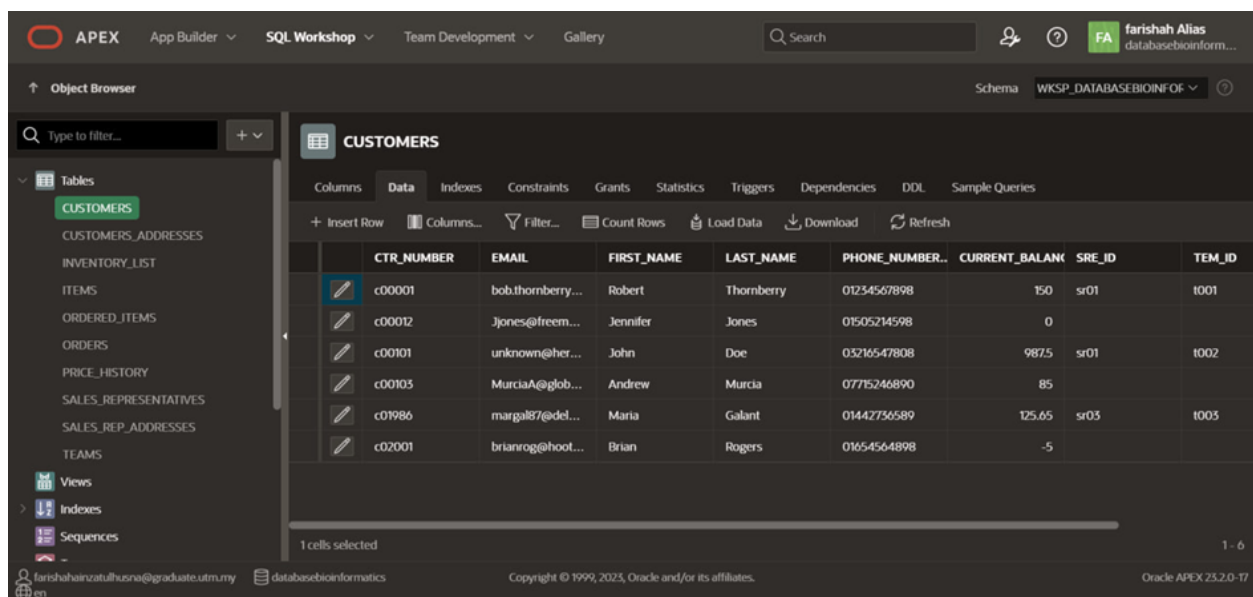
ID	NAME	NUMBER_OF_PLAYERS	DISCOUNT
t001	Rockets	25	10
t002	Celtics	42	20
t003	Rovers	8	
t004	Jets	10	5

2. Add a new Customer with the following details to the system

```
INSERT INTO customers(ctr_number, email, first_name, last_name, phone_number,
current_balance,loyalty_card_number) VALUES ('c02001', 'brianrog@hootech.com', 'Brian',
'Rogers', '01654564898', -5, 'lc4587');
```



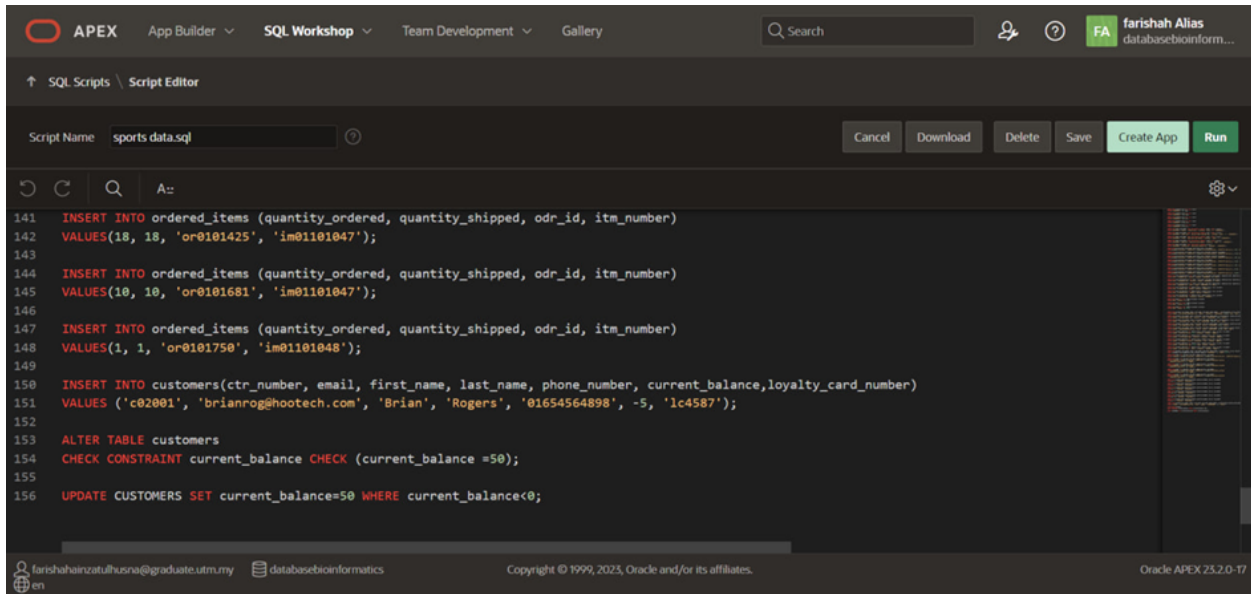
```
136 VALUES(5, 5, 'or0101250', 'im01101046');
137
138 INSERT INTO ordered_items (quantity_ordered, quantity_shipped, odr_id, itm_number)
139 VALUES(5, 5, 'or0101350', 'im01101044');
140
141 INSERT INTO ordered_items (quantity_ordered, quantity_shipped, odr_id, itm_number)
142 VALUES(10, 10, 'or0101425', 'im01101047');
143
144 INSERT INTO ordered_items (quantity_ordered, quantity_shipped, odr_id, itm_number)
145 VALUES(10, 10, 'or0101681', 'im01101047');
146
147 INSERT INTO ordered_items (quantity_ordered, quantity_shipped, odr_id, itm_number)
148 VALUES(1, 1, 'or0101750', 'im01101048');
149
150 INSERT INTO customers(ctr_number, email, first_name, last_name, phone_number, current_balance,loyalty_card_number)
151 VALUES ('c02001', 'brianrog@hootech.com', 'Brian', 'Rogers', '01654564898', -5, 'lc4587');
```



	CTR_NUMBER	EMAIL	FIRST_NAME	LAST_NAME	PHONE_NUMBER...	CURRENT_BALANC	SRE_ID	TEM_ID
	c00001	bob.thornberry...	Robert	Thornberry	01234567898	150	sr01	1001
	c00012	Jjones@freem...	Jennifer	Jones	01505214598	0		
	c00101	unknown@her...	John	Doe	05216547808	987.5	sr01	1002
	c00103	MurciaA@glob...	Andrew	Murcia	0776246890	85		
	c01986	margal87@del...	Maria	Galand	01442736589	125.65	sr03	1003
	c02001	brianrog@hoot...	Brian	Rogers	01654564898	-5		

3. This information violates the check constraint that the current balance must not be less than zero. Change the current balance to 50 and rerun the query.

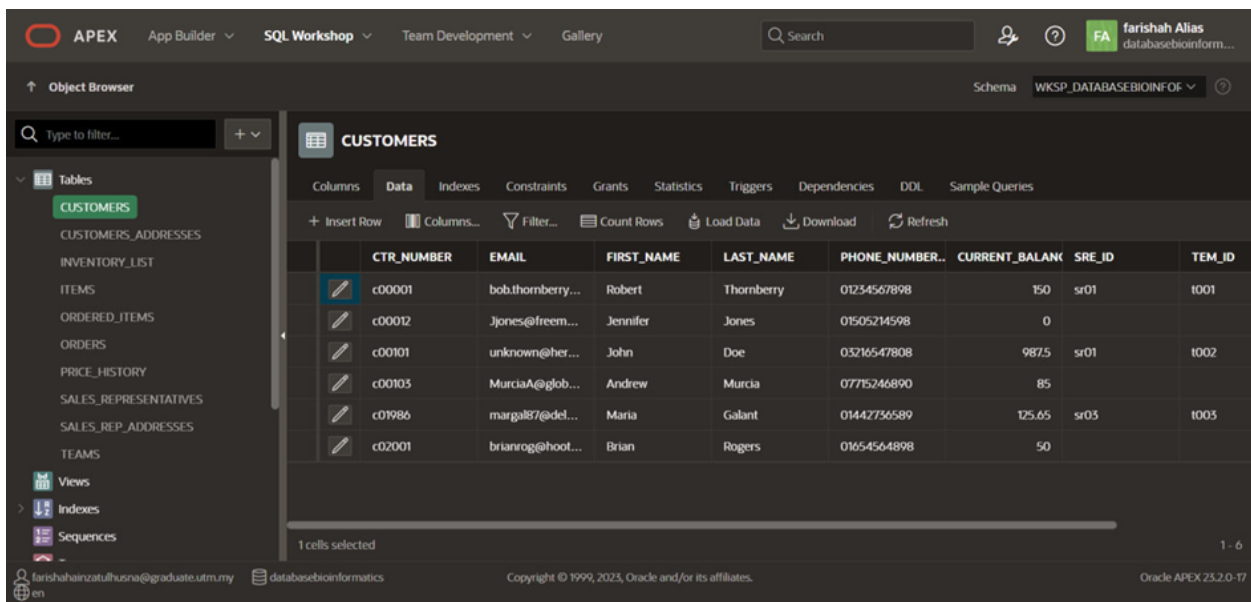
UPDATE CUSTOMERS SET current_balance=50 WHERE current_balance<0;



The screenshot shows the APEX SQL Workshop Script Editor. The script name is 'sports data.sql'. The script contains the following SQL statements:

```
141 INSERT INTO ordered_items (quantity_ordered, quantity_shipped, odr_id, itm_number)
142 VALUES(18, 18, 'or0101425', 'im01101047');
143
144 INSERT INTO ordered_items (quantity_ordered, quantity_shipped, odr_id, itm_number)
145 VALUES(10, 10, 'or0101681', 'im01101047');
146
147 INSERT INTO ordered_items (quantity_ordered, quantity_shipped, odr_id, itm_number)
148 VALUES(1, 1, 'or0101750', 'im01101048');
149
150 INSERT INTO customers(ctr_number, email, first_name, last_name, phone_number, current_balance,loyalty_card_number)
151 VALUES ('c02001', 'brianrog@hootech.com', 'Brian', 'Rogers', '01654564898', -5, '1c4587');
152
153 ALTER TABLE customers
154 CHECK CONSTRAINT current_balance CHECK (current_balance >=0);
155
156 UPDATE CUSTOMERS SET current_balance=50 WHERE current_balance<0;
```

The footer shows the user 'farishah Alias' and the version 'Oracle APEX 23.2.0-17'.



The screenshot shows the APEX Object Browser with the 'CUSTOMERS' table selected. The table data is displayed in a grid view. The columns are CTR_NUMBER, EMAIL, FIRST_NAME, LAST_NAME, PHONE_NUMBER, CURRENT_BALANCE, SRE_ID, and TEM_ID. The data rows are as follows:

CTR_NUMBER	EMAIL	FIRST_NAME	LAST_NAME	PHONE_NUMBER	CURRENT_BALANCE	SRE_ID	TEM_ID
c00001	bob.thornberry...	Robert	Thornberry	01234567898	150	sr01	1001
c00012	Jjones@freem...	Jennifer	Jones	01505214598	0		
c00101	unknown@her...	John	Doe	03216547808	9875	sr01	1002
c00103	MurciaA@glob...	Andrew	Murcia	0775246890	85		
c01986	margal87@del...	Maria	Galant	01442736589	125.65	sr03	1003
c02001	brianrog@hoot...	Brian	Rogers	01654564898	50		

The footer shows the user 'farishah Alias' and the version 'Oracle APEX 23.2.0-17'.