



UTM
UNIVERSITI TEKNOLOGI MALAYSIA

DATABASE (SECD 2523-10)

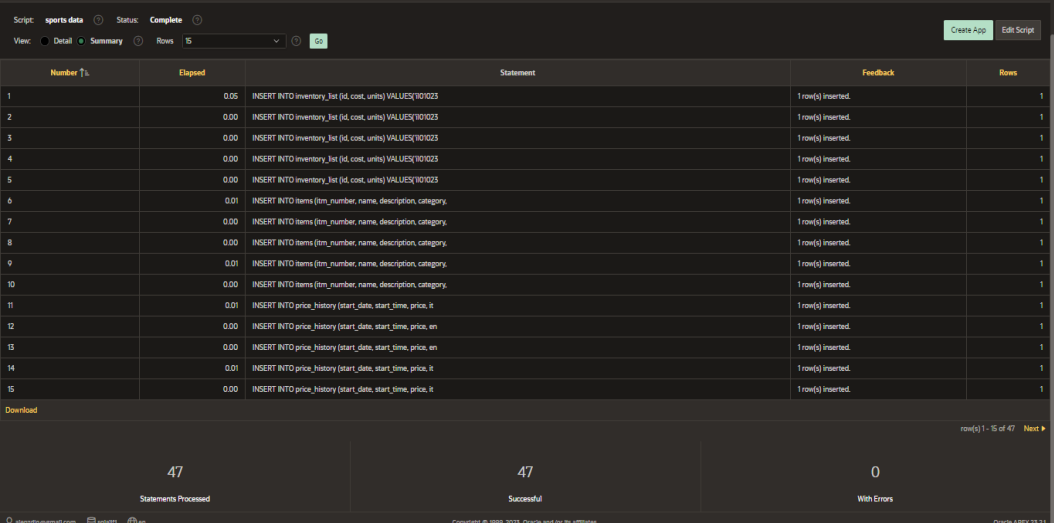
LAB EXERCISE 2 (DML1)

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A22EC0202

Section 6 Lesson 4 Exercise 1: Data Manipulation Language

Part 1 : Running a script to populate the tables.



Script: **sports data** Status: **Complete**

View: **Detail** Summary Rows: 15 **Go** **Create App** **Edit Script**

Number	Elapsed	Statement	Feedback	Rows
1	0.05	INSERT INTO inventory_list (id, cost, units) VALUES(101023)	1 row(s) inserted.	1
2	0.00	INSERT INTO inventory_list (id, cost, units) VALUES(101023)	1 row(s) inserted.	1
3	0.00	INSERT INTO inventory_list (id, cost, units) VALUES(101023)	1 row(s) inserted.	1
4	0.00	INSERT INTO inventory_list (id, cost, units) VALUES(101023)	1 row(s) inserted.	1
5	0.00	INSERT INTO inventory_list (id, cost, units) VALUES(101023)	1 row(s) inserted.	1
6	0.01	INSERT INTO items (item_number, name, description, category)	1 row(s) inserted.	1
7	0.00	INSERT INTO items (item_number, name, description, category)	1 row(s) inserted.	1
8	0.00	INSERT INTO items (item_number, name, description, category)	1 row(s) inserted.	1
9	0.01	INSERT INTO items (item_number, name, description, category)	1 row(s) inserted.	1
10	0.00	INSERT INTO items (item_number, name, description, category)	1 row(s) inserted.	1
11	0.01	INSERT INTO price_history (start_date, start_time, price, item)	1 row(s) inserted.	1
12	0.00	INSERT INTO price_history (start_date, start_time, price, item)	1 row(s) inserted.	1
13	0.00	INSERT INTO price_history (start_date, start_time, price, item)	1 row(s) inserted.	1
14	0.01	INSERT INTO price_history (start_date, start_time, price, item)	1 row(s) inserted.	1
15	0.00	INSERT INTO price_history (start_date, start_time, price, item)	1 row(s) inserted.	1

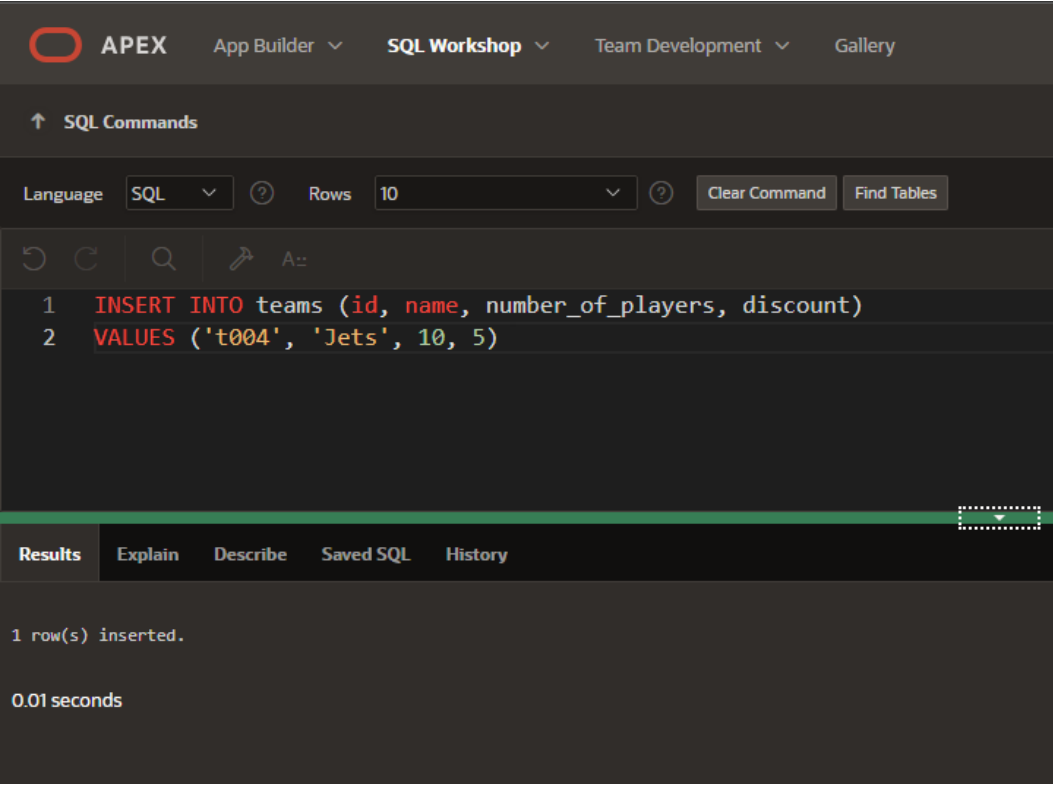
Download row(s) 1 - 15 of 47 **Next**

47	47	0
Statements Processed	Successful	With Errors

No error occurred while running the script.

Part 2- Inserting rows to the system

1. Add a new team to the system



APEX App Builder **SQL Workshop** Team Development Gallery

↑ SQL Commands

Language: **SQL** Rows: **10** **Clear Command** **Find Tables**

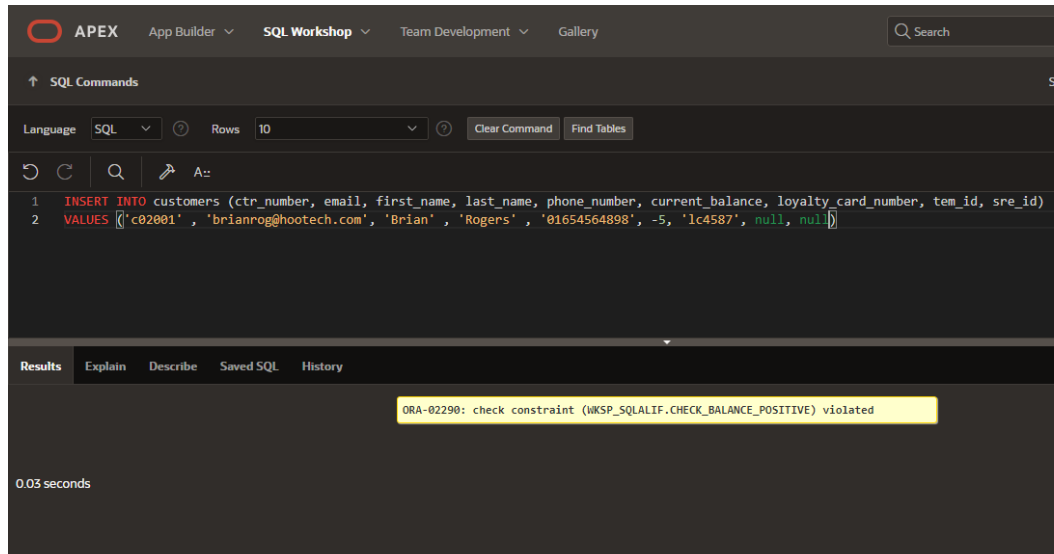
```
1 INSERT INTO teams (id, name, number_of_players, discount)
2 VALUES ('t004', 'Jets', 10, 5)
```

Results Explain Describe Saved SQL History

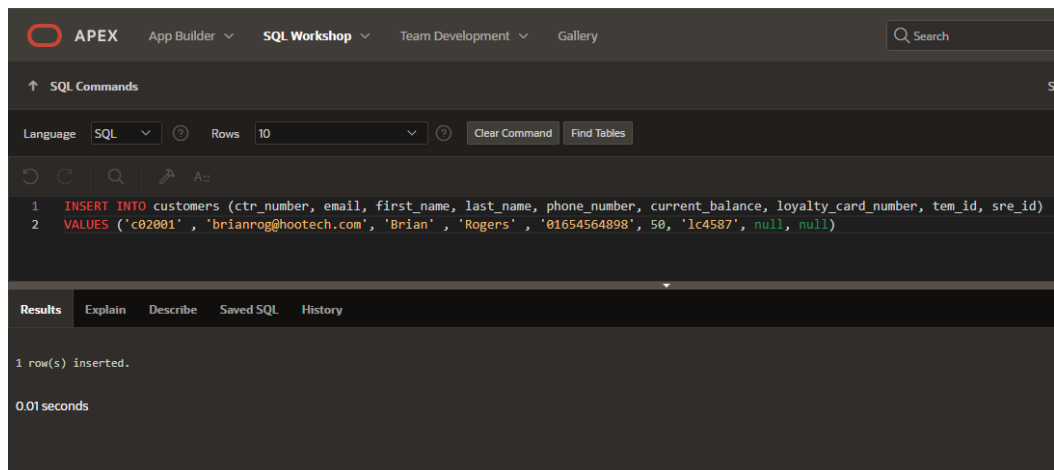
1 row(s) inserted.

0.01 seconds

2. Add a new Customer



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.

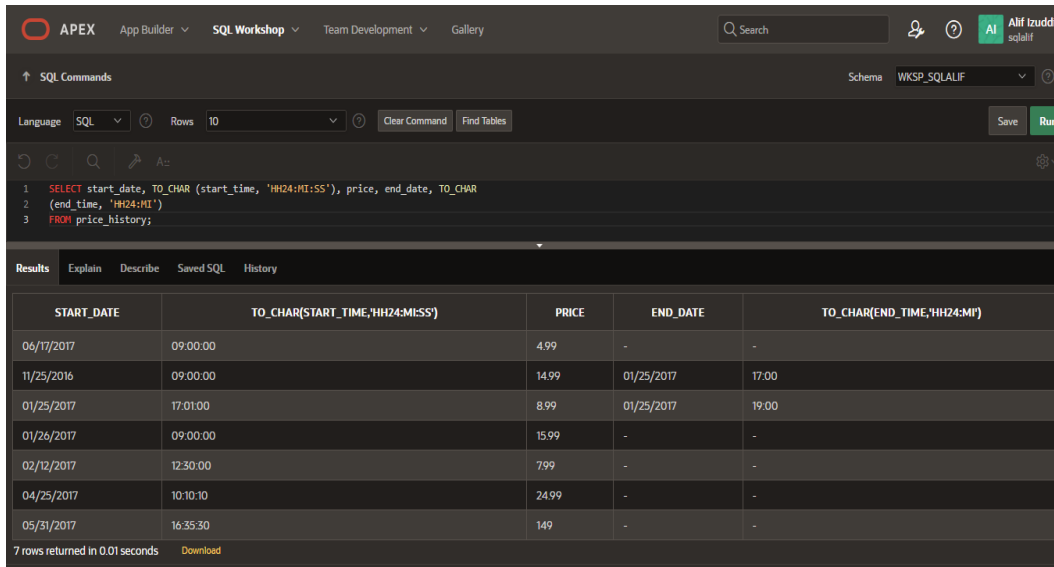


Section 6 Lesson 4 Exercise 2: Data Manipulation Language

Part 1- Updating rows to the system

1. Run the following query to view the content of the price_history table:

```
SELECT start_date, TO_CHAR (start_time, 'HH24:MI:SS'), price, end_date, TO_CHAR  
(end_time, 'HH24:MI')  
FROM price_history;
```



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 'Alif Izuddin' are on the right. The 'SQL Commands' section shows a query in the 'SQL' language, with 'Rows' set to 10. The query is:
1 SELECT start_date, TO_CHAR (start_time, 'HH24:MI:SS'), price, end_date, TO_CHAR
2 (end_time, 'HH24:MI')
3 FROM price_history;
The 'Results' tab is active, displaying a table with 7 rows. The table has 5 columns: START_DATE, TO_CHAR(START_TIME,'HH24:MI:SS'), PRICE, END_DATE, and TO_CHAR(END_TIME,'HH24:MI'). The data is as follows:

START_DATE	TO_CHAR(START_TIME,'HH24:MI:SS')	PRICE	END_DATE	TO_CHAR(END_TIME,'HH24:MI')
06/17/2017	09:00:00	4.99	-	-
11/25/2016	09:00:00	14.99	01/25/2017	17:00
01/25/2017	17:01:00	8.99	01/25/2017	19:00
01/26/2017	09:00:00	15.99	-	-
02/12/2017	12:30:00	7.99	-	-
04/25/2017	10:10:10	24.99	-	-
05/31/2017	16:35:30	14.9	-	-

At the bottom, it states '7 rows returned in 0.01 seconds' with a 'Download' link.

2. Obl is going to update the price of the premium bat so you will need to write a query that will close off the current price by adding the system date values to the end_date and end_time fields. To run this query you will need to both match the item number and identify that the end date is null. This ensures that you are updating the latest price.

APEX

App Builder

SQL Workshop

Team Development

Gallery

SQL Commands

Language

SQL

Rows

10

Clear Command

Find Tables

A::

1

UPDATE price_history

2

SET end_date = CURRENT_DATE, end_time = CURRENT_TIMESTAMP

3

WHERE itm_number = 'im01101044' AND end_date IS NULL ;

Results

Explain

Describe

Saved SQL

History

1 row(s) updated.

0.02 seconds

3. Rerun the select statement on the price_history table to ensure that the statement has been executed.

APEX

App Builder

SQL Workshop

Team Development

Gallery

Search

Alif Izuddin

sqlalif

SQL Commands

Language

SQL

Rows

10

Clear Command

Find Tables

Save

Run

A::

1

SELECT *

2

FROM price_history ;

Results

Explain

Describe

Saved SQL

History

START_DATE	START_TIME	PRICE	END_DATE	END_TIME	ITM_NUMBER
06/17/2017	06/17/2016	4.99	12/10/2023	12/10/2023	im01101044
11/25/2016	11/25/2016	14.99	01/25/2017	01/25/2017	im01101045
01/25/2017	01/25/2017	8.99	01/25/2017	01/25/2017	im01101045
01/26/2017	01/26/2017	15.99	-	-	im01101045
02/12/2017	02/12/2017	7.99	-	-	im01101046
04/25/2017	04/25/2017	24.99	-	-	im01101047
05/31/2017	05/31/2017	149	-	-	im01101048

7 rows returned in 0.01 secondsDownload

4. Insert a new row that will use the current date and time to set the new price of the premium bat to be 99.99.

APEX

App Builder

SQL Workshop

Team Development

Gallery

↑ SQL Commands

Language SQL Rows 10 Clear Command Find Tables

↺ ↻ 🔍 📌 A::

1 INSERT INTO price_history (start_date, start_time, price, itm_number)

2 VALUES (SYSDATE, SYSTIMESTAMP, 99.99, 'im01101048');

3

Results

Explain

Describe

Saved SQL

History

1 row(s) inserted.

0.01 seconds

5. Rerun the select statement on the price_history table to ensure that the statement has been executed.

APEX

App Builder

SQL Workshop

Team Development

Gallery

↑ SQL Commands

Language SQL Rows 10 Clear Command Find Tables Save

↺ ↻ 🔍 📌 A::

1 SELECT *

2 FROM price_history ;

Results

Explain

Describe

Saved SQL

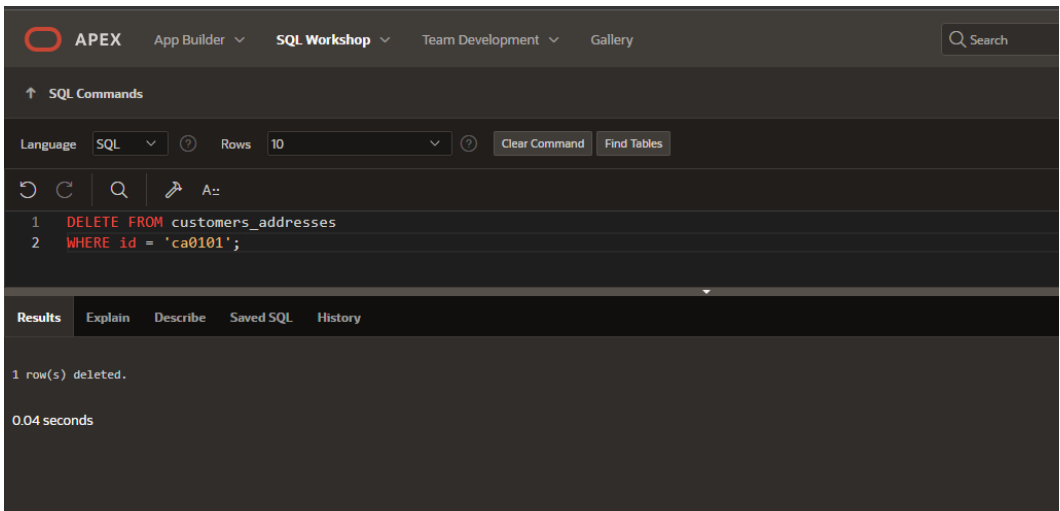
History

START_DATE	START_TIME	PRICE	END_DATE	END_TIME	ITM_NUMBER
06/17/2017	06/17/2016	4.99	12/10/2023	12/10/2023	im01101044
11/25/2016	11/25/2016	14.99	01/25/2017	01/25/2017	im01101045
01/25/2017	01/25/2017	8.99	01/25/2017	01/25/2017	im01101045
01/26/2017	01/26/2017	15.99	-	-	im01101045
02/12/2017	02/12/2017	7.99	-	-	im01101046
04/25/2017	04/25/2017	24.99	-	-	im01101047
05/31/2017	05/31/2017	149	-	-	im01101048
12/10/2023	12/10/2023	99.99	-	-	im01101048

8 rows returned in 0.00 seconds Download

Part 2: Deleting rows from the system

1. Bob Thornberry has contacted Obl to ask that the 83 Barrhill Drive address be removed from the system as he can longer receive parcels at this address. Write a SQL statement that will remove this address from the system.



2. Run a select statement on the customers_addresses table to ensure that the statement has been executed.

