



UTM
UNIVERSITI TEKNOLOGI MALAYSIA

SECD2523 - DATABASE

SECTION 10

SQL 2 : DML 1 PART 2

PREPARED FOR:

MADAM ROZILAWATI BINTI DOLLAH @ MD ZAIN

PREPARED BY:

NAME	MATRICS NO
NUR ALIA MAISARAH BINTI WAN ASMIRA	A22EC0242

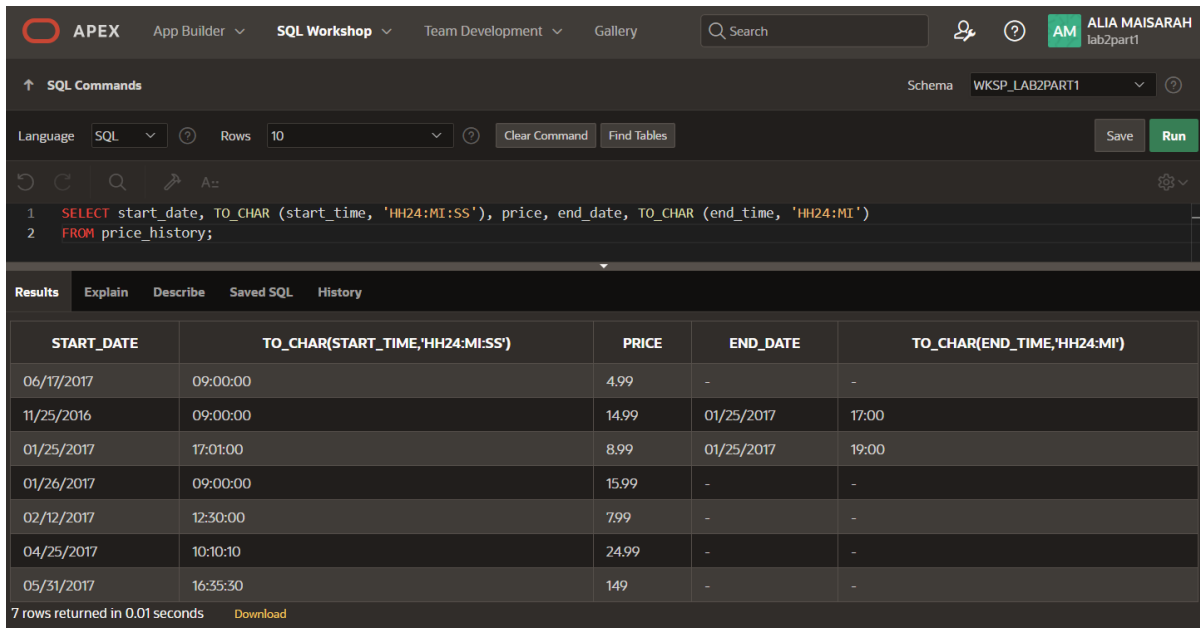
Section 6 Lesson 4 Exercise 2: Data Manipulation Language

Use DML operations to manage database tables (S6L4 Objective 2) .In this exercise you will populate and work with the data that is stored in the database system.

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 'ALIA MAISARAH lab2part1' are also visible. 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 (end_time, 'HH24:MI')
2 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	149	-	-

7 rows returned in 0.01 seconds [Download](#)

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.

The screenshot shows the 'SQL Commands' window in a database tool. The schema is set to 'WKSP_LAB2PART1'. The SQL command is as follows:

```
1 UPDATE price_history
2 SET end_date = CURRENT_DATE, end_time = CURRENT_TIMESTAMP
3 WHERE itm_number = 'im01101047' AND end_date IS NULL;
```

The 'Results' tab shows the execution outcome: '1 row(s) updated.' and '0.00 seconds'.

The screenshot displays the APEX SQL Workshop interface. The 'Object Browser' on the left lists various database objects, with 'PRICE_HISTORY' highlighted. The main panel shows the 'Data' tab for the 'PRICE_HISTORY' table, displaying a list of price history records.

	START_DATE	START_TIME	PRICE	END_DATE	END_TIME	ITM_NUMBER
	06/17/2017	06/17/2016	4.99			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	12/09/2023	12/09/2023	im01101047
	05/31/2017	05/31/2017	149			im01101048

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

The screenshot shows the APEX SQL Workshop interface. At the top, there's a navigation bar with 'APEX', 'App Builder', 'SQL Workshop', 'Team Development', and 'Gallery'. A search bar is also present. The user is logged in as 'ALIA MAISARAH' with the role 'lab2part1'. Below the navigation bar, the 'SQL Commands' section is active, showing the schema 'WKSP_LAB2PART1'. The SQL command entered is:

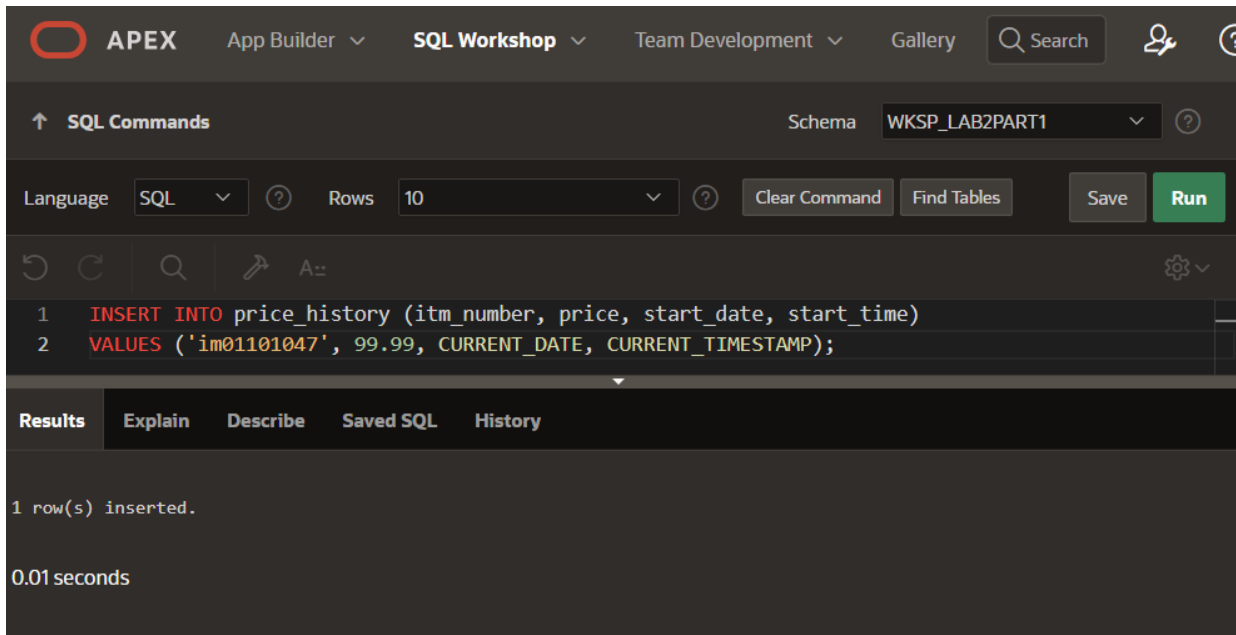
```
1 SELECT *
2 FROM price_history;
```

The command is saved, and the 'Run' button is highlighted. Below the command editor, the 'Results' tab is selected, displaying a table with 7 rows. The table has the following columns: START_DATE, START_TIME, PRICE, END_DATE, END_TIME, and ITM_NUMBER. The data is as follows:

START_DATE	START_TIME	PRICE	END_DATE	END_TIME	ITM_NUMBER
06/17/2017	06/17/2016	4.99	-	-	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	12/09/2023	12/09/2023	im01101047
05/31/2017	05/31/2017	149	-	-	im01101048

At the bottom of the results section, it states '7 rows returned in 0.01 seconds' and provides a 'Download' link.

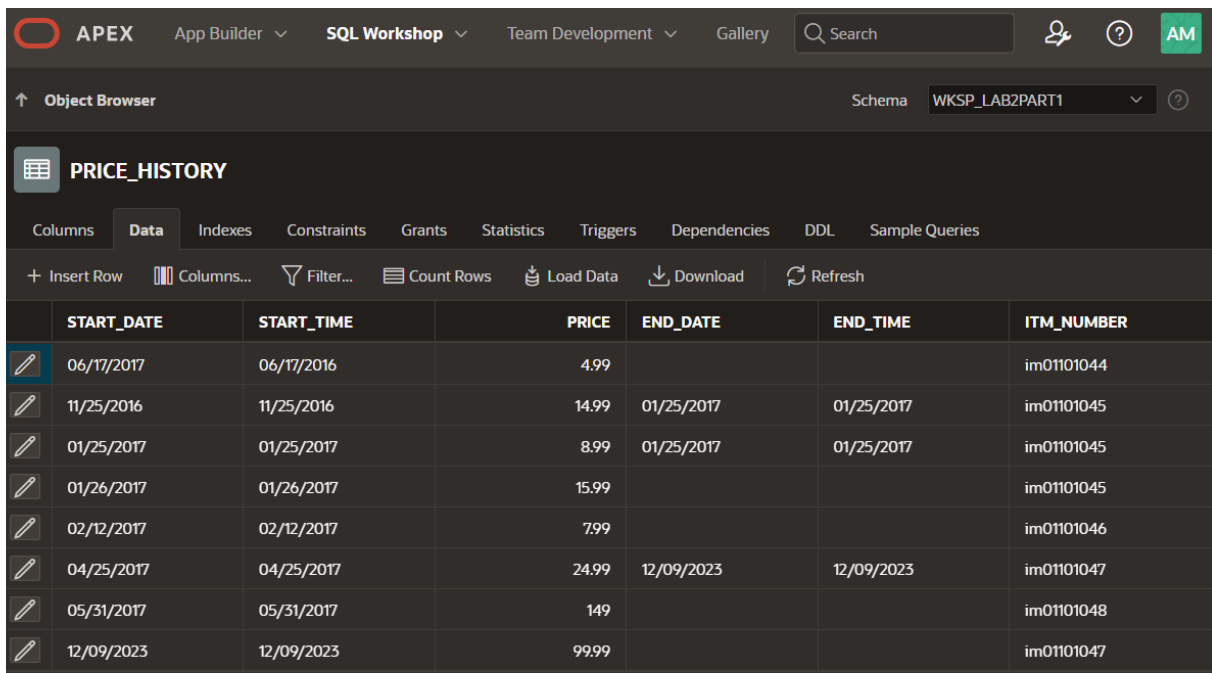
4. Insert a new row that will use the current date and time to set the new price of the premium bat to be 99.99.











The screenshot shows the APEX SQL Workshop interface. The top navigation bar includes the APEX logo, App Builder, SQL Workshop, Team Development, and Gallery. The main area is titled "SQL Commands" and shows the schema "WKSP_LAB2PART1". The language is set to "SQL" and the number of rows is set to "10". The SQL command being executed is:

```
1 INSERT INTO price_history (itm_number, price, start_date, start_time)
2 VALUES ('im01101047', 99.99, CURRENT_DATE, CURRENT_TIMESTAMP);
```

The results section shows "1 row(s) inserted." and "0.01 seconds".



The screenshot shows the APEX SQL Workshop interface with the "PRICE_HISTORY" table selected. The table has columns: START_DATE, START_TIME, PRICE, END_DATE, END_TIME, and ITM_NUMBER. The data is as follows:

	START_DATE	START_TIME	PRICE	END_DATE	END_TIME	ITM_NUMBER
	06/17/2017	06/17/2016	4.99			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	12/09/2023	12/09/2023	im01101047
	05/31/2017	05/31/2017	149			im01101048
	12/09/2023	12/09/2023	99.99			im01101047

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

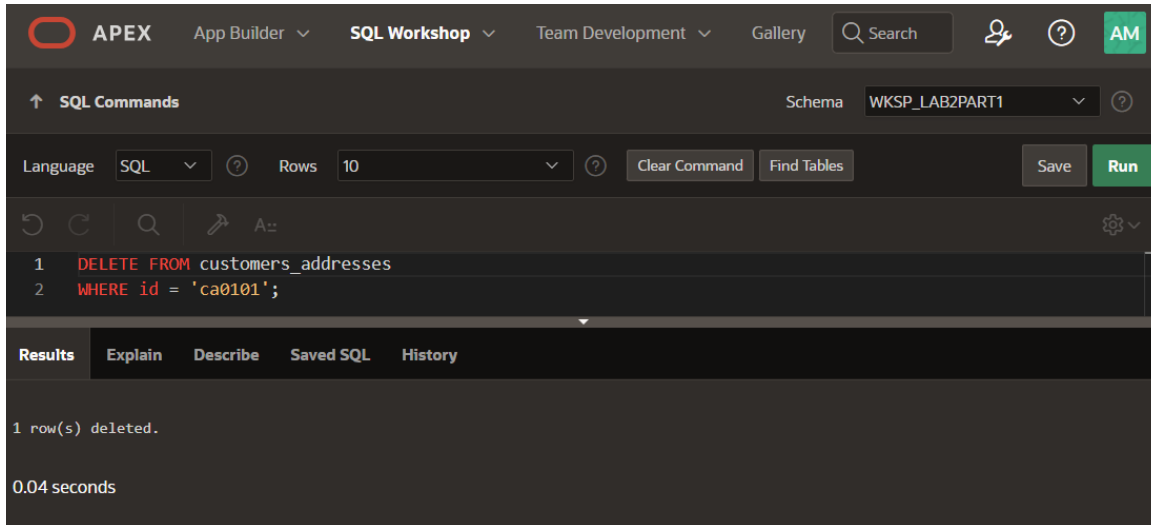
The screenshot shows the APEX SQL Workshop interface. At the top, there's a navigation bar with 'APEX', 'App Builder', 'SQL Workshop', 'Team Development', 'Gallery', a search bar, and user icons. Below this, the 'SQL Commands' section is active, showing a schema dropdown set to 'WKSP_LAB2PART1'. The SQL command editor contains two lines: '1 SELECT *' and '2 FROM price_history;'. Below the editor, there are buttons for 'Clear Command', 'Find Tables', 'Save', and 'Run'. The 'Results' tab is selected, displaying a table with 8 rows. The table has columns: START_DATE, START_TIME, PRICE, END_DATE, END_TIME, and ITM_NUMBER. The data shows a price history for item 'im01101044' from 06/17/2017 to 12/09/2023. At the bottom, it states '8 rows returned in 0.00 seconds' with a 'Download' link.

START_DATE	START_TIME	PRICE	END_DATE	END_TIME	ITM_NUMBER
06/17/2017	06/17/2016	4.99	-	-	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	12/09/2023	12/09/2023	im01101047
05/31/2017	05/31/2017	149	-	-	im01101048
12/09/2023	12/09/2023	99.99	-	-	im01101047

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.

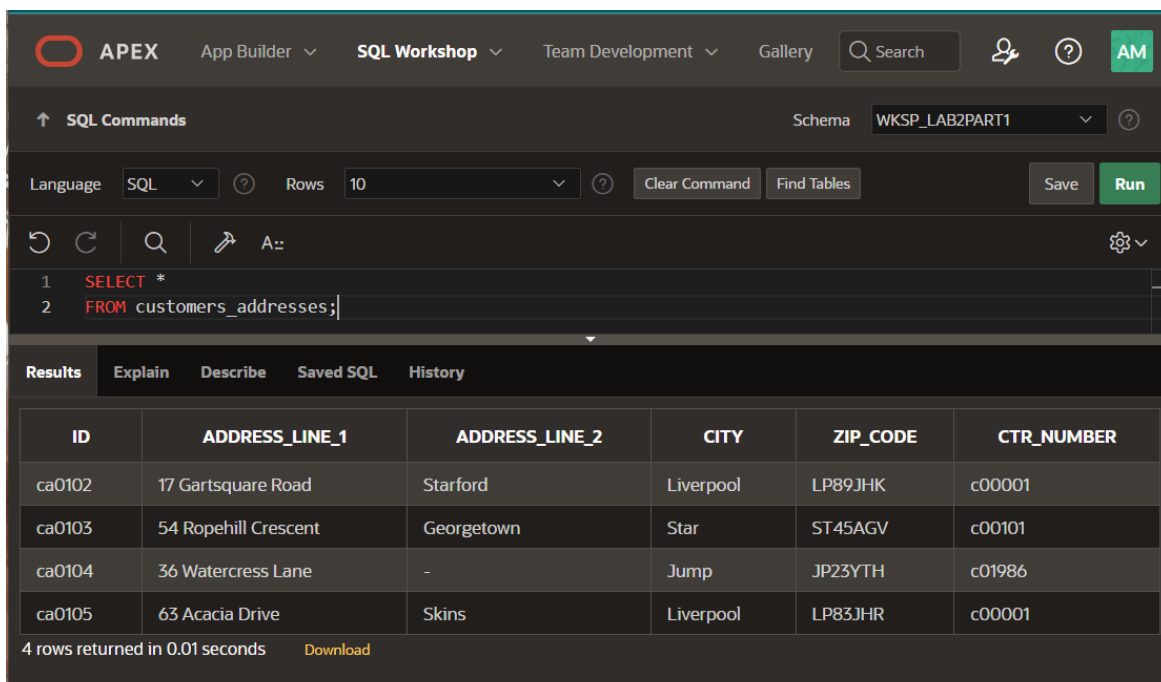


The screenshot shows the APEX SQL Workshop interface. The top navigation bar includes the APEX logo, App Builder, SQL Workshop, Team Development, and Gallery. A search bar and user profile (AM) are also present. The main area is titled "SQL Commands" and shows the schema "WKSP_LAB2PART1". The language is set to "SQL" and the number of rows is set to "10". The SQL command entered is:

```
1 DELETE FROM customers_addresses
2 WHERE id = 'ca0101';
```

The command has been executed, and the results show "1 row(s) deleted." and "0.04 seconds".

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



The screenshot shows the APEX SQL Workshop interface. The top navigation bar includes the APEX logo, App Builder, SQL Workshop, Team Development, and Gallery. A search bar and user profile (AM) are also present. The main area is titled "SQL Commands" and shows the schema "WKSP_LAB2PART1". The language is set to "SQL" and the number of rows is set to "10". The SQL command entered is:

```
1 SELECT *
2 FROM customers_addresses;
```

The command has been executed, and the results are displayed in a table:

ID	ADDRESS_LINE_1	ADDRESS_LINE_2	CITY	ZIP_CODE	CTR_NUMBER
ca0102	17 Gartsquare Road	Starford	Liverpool	LP89JHK	c00001
ca0103	54 Ropehill Crescent	Georgetown	Star	ST45AGV	c00101
ca0104	36 Watercress Lane	-	Jump	JP23YTH	c01986
ca0105	63 Acacia Drive	Skins	Liverpool	LP83JHR	c00001

4 rows returned in 0.01 seconds [Download](#)