

**DATABASE SECTION – 03**  
**LAB 2 SQL1-DML1**  
**EXERCISE 1 & 2**

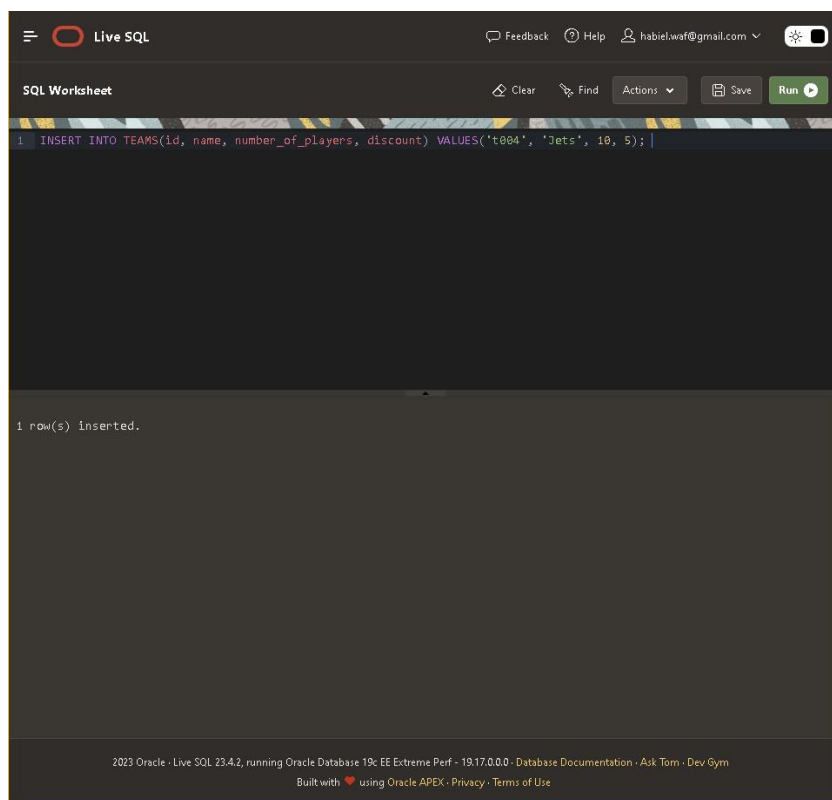
NAME : MUHAMMAD HABIEL WAFI BIN ZAIRI  
MATRICS NUM : B23CS0009  
DATE : 10 NOVEMBER 2023  
LECTURER : DR IZYAN IZZATI BINTI KAMSANI

# EXERCISE 1

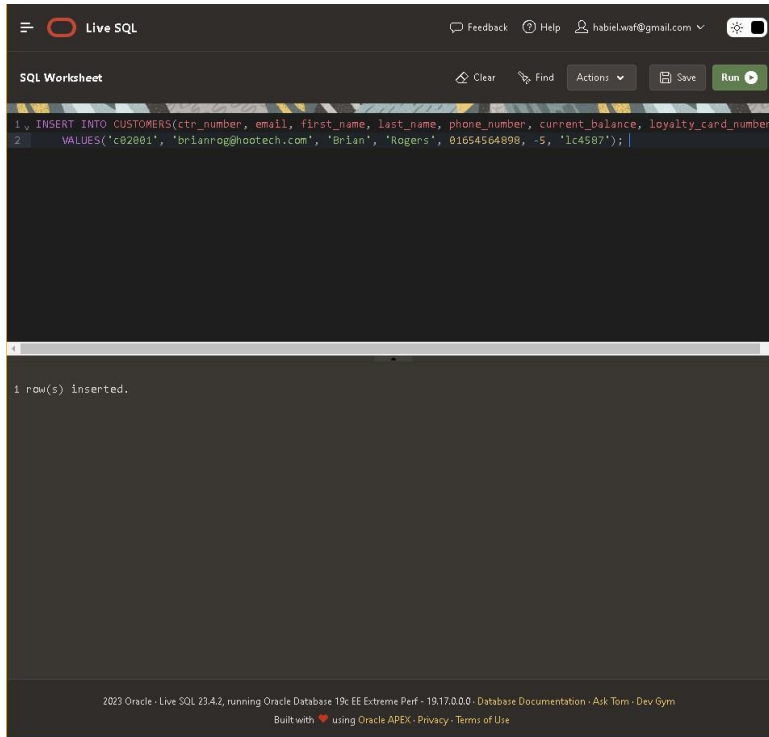
## PART 1: Running a script to populate the tables

## PART 2: Inserting rows to the system

- 1) INSERT INTO teams(id, name, number\_of\_players, discount)  
VALUES('t004', 'Jets', 10, 5);

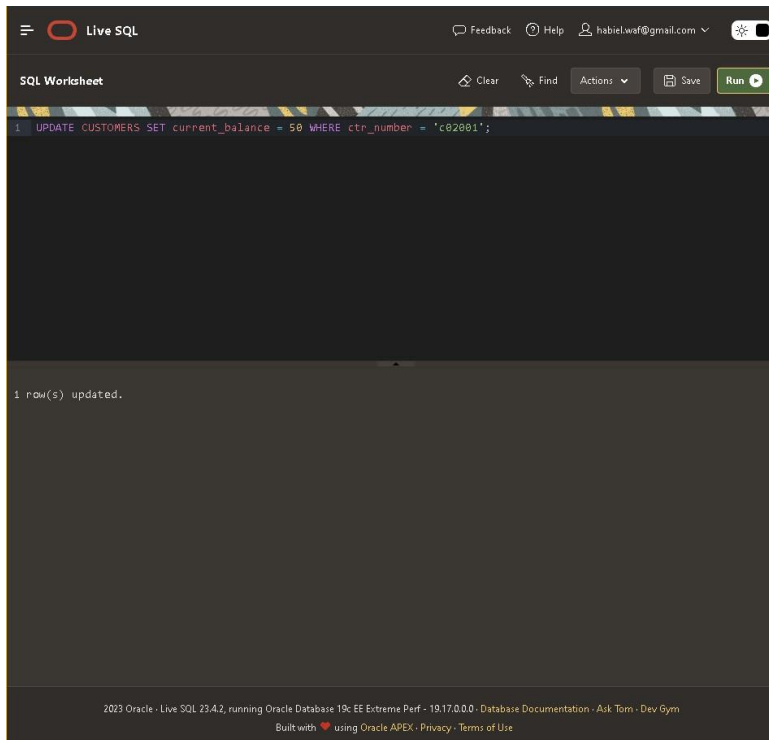


- 2) INSERT INTO CUSTOMERS(ctr\_number, email, first\_name, last\_name, phone\_number, current\_balance, loyalty\_card\_number)  
VALUES('c02001', 'brianrog@hoootech.com', 'Brian', 'Rogers', 01654564898, -5, 'lc4587');



The screenshot shows the Live SQL web interface. At the top, there's a header with the 'Live SQL' logo, a 'Feedback' link, a 'Help' link, a user profile 'habielwaf@gmail.com', and a settings icon. Below the header is a 'SQL Worksheet' section with a toolbar containing 'Clear', 'Find', 'Actions', 'Save', and a 'Run' button. The SQL code is entered in a text area:   
1. INSERT INTO CUSTOMERS(ctr\_number, email, first\_name, last\_name, phone\_number, current\_balance, loyalty\_card\_number)  
2. VALUES('c02001', 'brianrog@hoootech.com', 'Brian', 'Rogers', 01654564898, -5, 'lc4587');  
Below the code area, the execution result is displayed: '1 row(s) inserted.' At the bottom of the interface, there is a footer with version information: '2023 Oracle - Live SQL 23.4.2, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0 - Database Documentation - Ask Tom - Dev Gym' and a note 'Built with using Oracle APEX - Privacy - Terms of Use'.

- 3) UPDATE CUSTOMERS SET current\_balance = 50 WHERE ctr\_number = 'c02001';

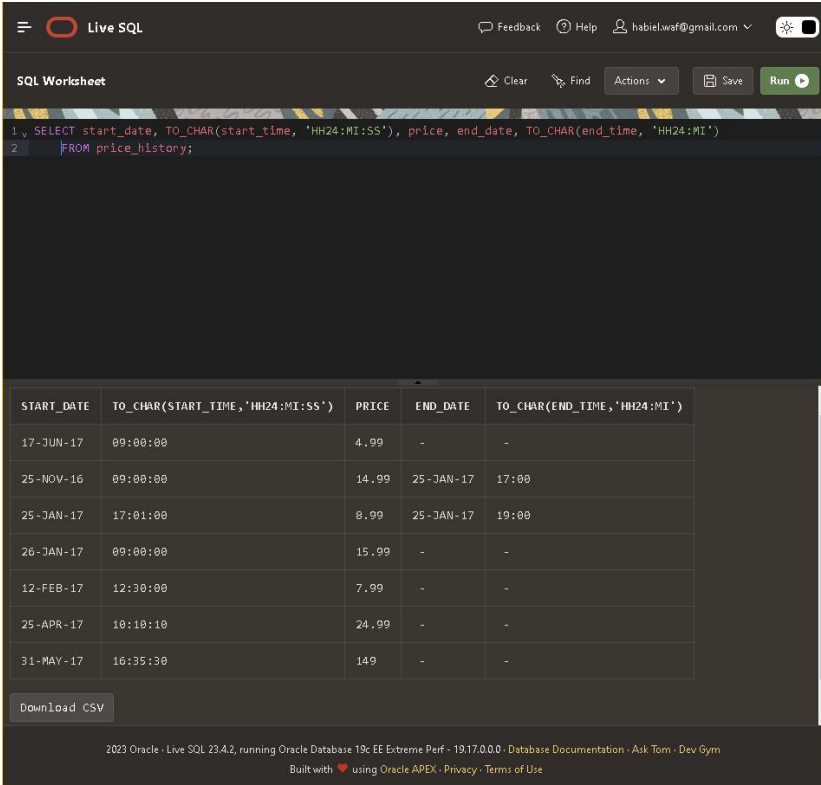


The screenshot shows the Live SQL web interface. At the top, there's a header with the 'Live SQL' logo, a 'Feedback' link, a 'Help' link, a user profile 'habielwaf@gmail.com', and a settings icon. Below the header is a 'SQL Worksheet' section with a toolbar containing 'Clear', 'Find', 'Actions', 'Save', and a 'Run' button. The SQL code is entered in a text area:   
1. UPDATE CUSTOMERS SET current\_balance = 50 WHERE ctr\_number = 'c02001';  
Below the code area, the execution result is displayed: '1 row(s) updated.' At the bottom of the interface, there is a footer with version information: '2023 Oracle - Live SQL 23.4.2, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0 - Database Documentation - Ask Tom - Dev Gym' and a note 'Built with using Oracle APEX - Privacy - Terms of Use'.

## EXERCISE 2

### PART 1: Updating rows to the system

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



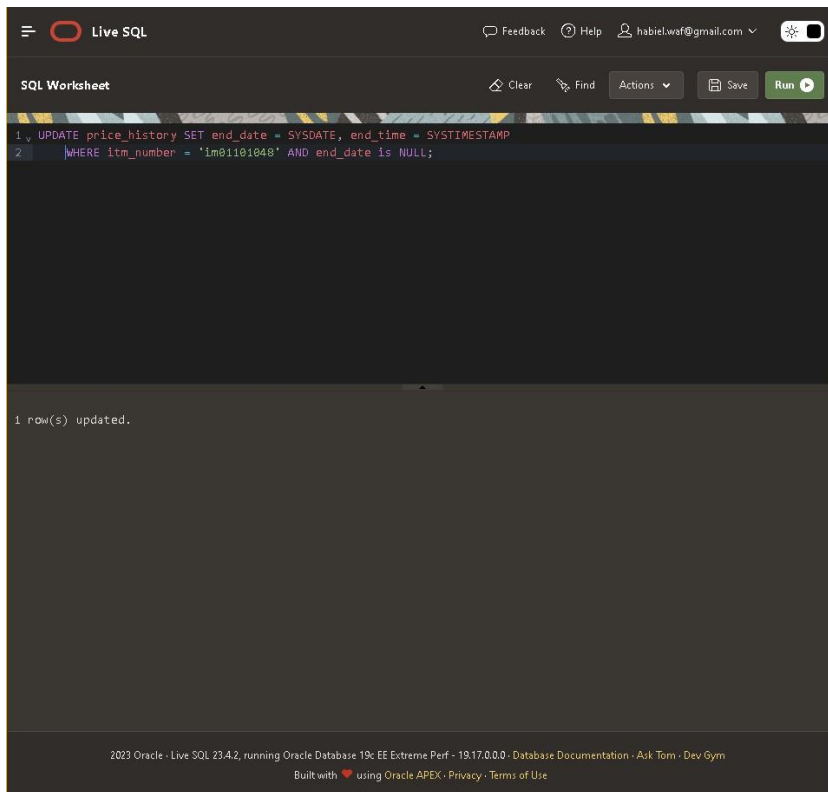
The screenshot shows the Live SQL interface with the following components:

- Header:** Live SQL logo, Feedback, Help, user profile (habielwaf@gmail.com), and a dark mode toggle.
- Toolbar:** Clear, Find, Actions, Save, and Run buttons.
- SQL Worksheet:** Contains the query:

```
1 SELECT start_date, TO_CHAR(start_time, 'HH24:MI:SS'), price, end_date, TO_CHAR(end_time, 'HH24:MI')
2 FROM price_history;
```
- Results Table:** A table with 5 columns: START\_DATE, TO\_CHAR(START\_TIME, 'HH24:MI:SS'), PRICE, END\_DATE, and TO\_CHAR(END\_TIME, 'HH24:MI'). It contains 7 rows of data.
- Download CSV:** A button to download the results as a CSV file.
- Footer:** Copyright information for Oracle Live SQL 23.4.2, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0.

START_DATE	TO_CHAR(START_TIME, 'HH24:MI:SS')	PRICE	END_DATE	TO_CHAR(END_TIME, 'HH24:MI')
17-JUN-17	09:00:00	4.99	-	-
25-NOV-16	09:00:00	14.99	25-JAN-17	17:00
25-JAN-17	17:01:00	8.99	25-JAN-17	19:00
26-JAN-17	09:00:00	15.99	-	-
12-FEB-17	12:30:00	7.99	-	-
25-APR-17	10:10:10	24.99	-	-
31-MAY-17	16:35:30	149	-	-

- 2) UPDATE price\_history SET end\_date = SYSDATE, end\_time = SYSTIMESTAMP  
WHERE itm\_number = 'im01101048' AND end\_date is NULL;



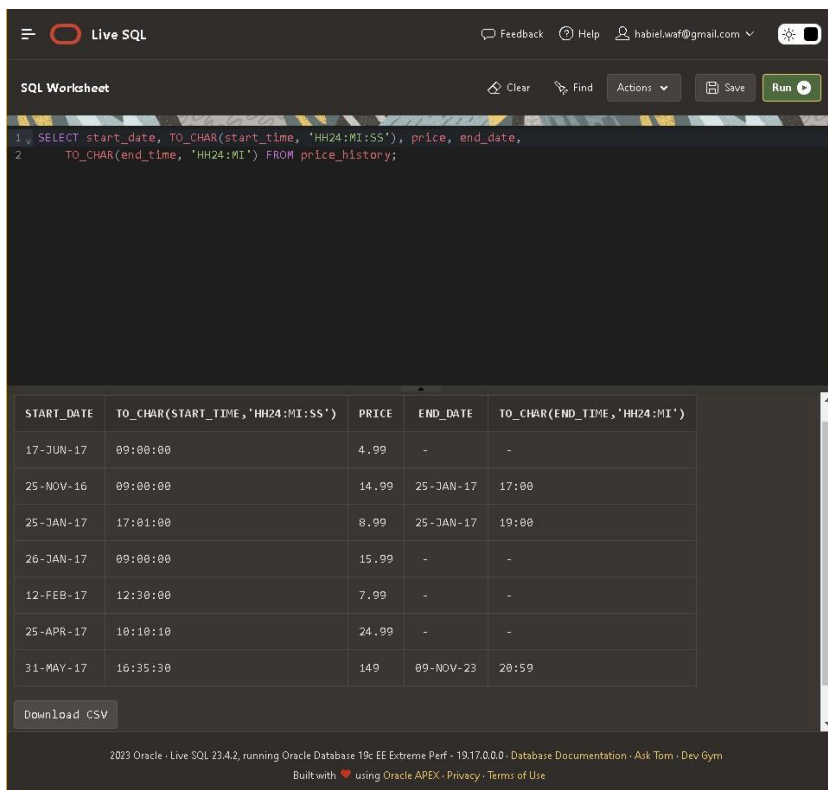
The screenshot shows the Live SQL interface with a dark theme. At the top, there's a header with the 'Live SQL' logo, a 'Feedback' button, a 'Help' button, a user profile 'habiel.waf@gmail.com', and a settings icon. Below the header is a toolbar with 'Clear', 'Find', 'Actions', 'Save', and 'Run' buttons. The main area contains a SQL worksheet with two lines of code:   
1. UPDATE price\_history SET end\_date = SYSDATE, end\_time = SYSTIMESTAMP  
2. WHERE itm\_number = 'im01101048' AND end\_date is NULL;  
Below the code, the result is displayed: '1 row(s) updated.' At the bottom, a footer provides version information: '2023 Oracle - Live SQL 23.4.2, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0 - Database Documentation - Ask Tom - Dev Gym' and mentions it's built with Oracle APEX.

```
1 UPDATE price_history SET end_date = SYSDATE, end_time = SYSTIMESTAMP
2 WHERE itm_number = 'im01101048' AND end_date is NULL;
```

1 row(s) updated.

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- 3) 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 Live SQL interface with the same header and toolbar as the previous image. The SQL worksheet contains two lines of code:   
1. SELECT start\_date, TO\_CHAR(start\_time, 'HH24:MI:SS'), price, end\_date,  
2. TO\_CHAR(end\_time, 'HH24:MI') FROM price\_history;  
Below the code, a table of results is displayed. The table has five columns: START\_DATE, TO\_CHAR(START\_TIME, 'HH24:MI:SS'), PRICE, END\_DATE, and TO\_CHAR(END\_TIME, 'HH24:MI'). There are seven rows of data. Below the table is a 'Download CSV' button. The footer is identical to the previous screenshot.

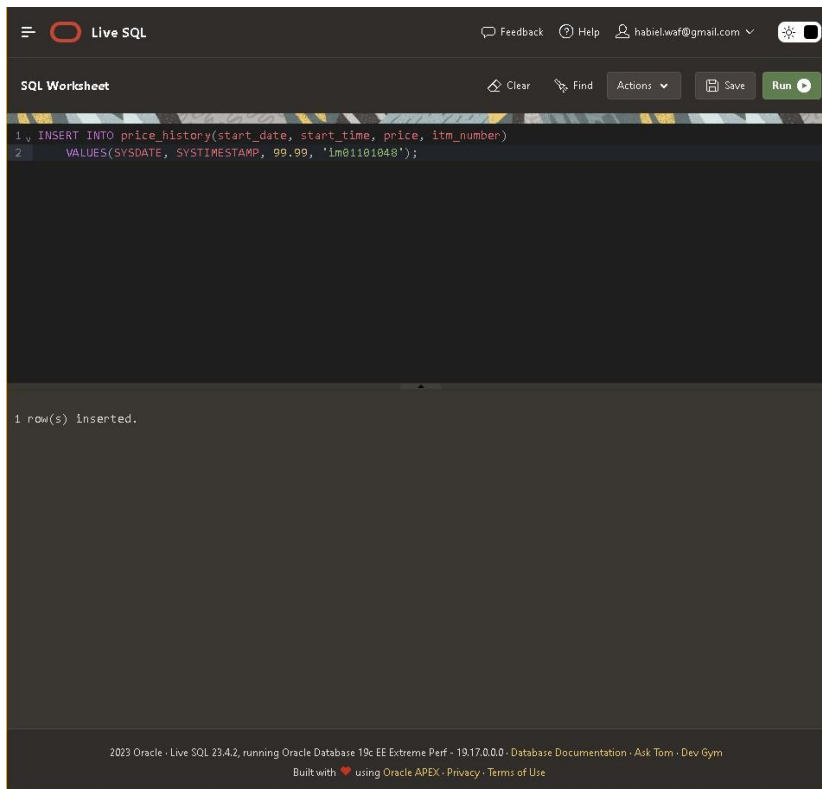
```
1 SELECT start_date, TO_CHAR(start_time, 'HH24:MI:SS'), price, end_date,
2 TO_CHAR(end_time, 'HH24:MI') FROM price_history;
```

START_DATE	TO_CHAR(START_TIME, 'HH24:MI:SS')	PRICE	END_DATE	TO_CHAR(END_TIME, 'HH24:MI')
17-JUN-17	09:00:00	4.99	-	-
25-NOV-16	09:00:00	14.99	25-JAN-17	17:00
25-JAN-17	17:01:00	8.99	25-JAN-17	19:00
26-JAN-17	09:00:00	15.99	-	-
12-FEB-17	12:30:00	7.99	-	-
25-APR-17	10:10:10	24.99	-	-
31-MAY-17	16:35:30	149	09-NOV-23	20:59

Download CSV

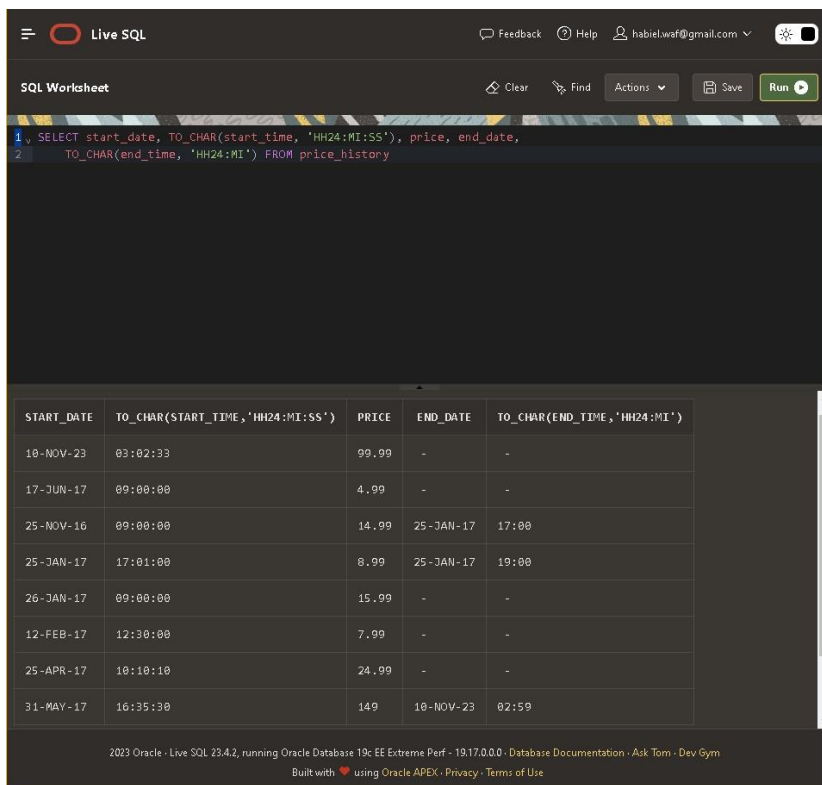
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- 4) INSERT INTO price\_history(start\_date, start\_time, price, itm\_number)  
VALUES(SYSDATE, SYSTIMESTAMP, 99.99, 'im01101048');



The screenshot shows the Live SQL interface with a dark theme. The SQL Worksheet contains two lines of code: `1 INSERT INTO price_history(start_date, start_time, price, itm_number)` and `2 VALUES(SYSDATE, SYSTIMESTAMP, 99.99, 'im01101048');`. Below the code, the execution result is displayed: `1 row(s) inserted.`. The interface includes a top bar with 'Live SQL', 'Feedback', 'Help', and a user profile. A toolbar with 'Clear', 'Find', 'Actions', 'Save', and 'Run' is also visible.

- 5) SELECT start\_date, TO\_CHAR(start\_time, 'HH24:MI:SS'), price, end\_date,  
TO\_CHAR(end\_time, 'HH24:MI') FROM price\_history;

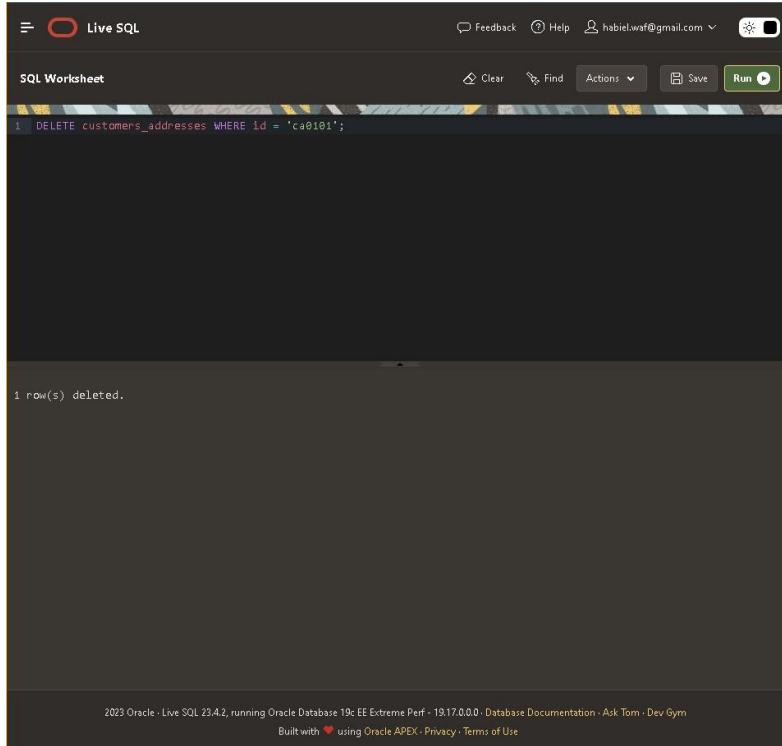


The screenshot shows the Live SQL interface with a dark theme. The SQL Worksheet contains two lines of code: `1 SELECT start_date, TO_CHAR(start_time, 'HH24:MI:SS'), price, end_date,` and `2 TO_CHAR(end_time, 'HH24:MI') FROM price_history`. Below the code, the execution result is displayed as a table with 5 columns: `START_DATE`, `TO_CHAR(START_TIME, 'HH24:MI:SS')`, `PRICE`, `END_DATE`, and `TO_CHAR(END_TIME, 'HH24:MI')`. The table contains 8 rows of data. The interface includes a top bar with 'Live SQL', 'Feedback', 'Help', and a user profile. A toolbar with 'Clear', 'Find', 'Actions', 'Save', and 'Run' is also visible.


START_DATE	TO_CHAR(START_TIME, 'HH24:MI:SS')	PRICE	END_DATE	TO_CHAR(END_TIME, 'HH24:MI')
18-NOV-23	03:02:33	99.99	-	-
17-JUN-17	09:00:00	4.99	-	-
25-NOV-16	09:00:00	14.99	25-JAN-17	17:00
25-JAN-17	17:01:00	8.99	25-JAN-17	19:00
26-JAN-17	09:00:00	15.99	-	-
12-FEB-17	12:30:00	7.99	-	-
25-APR-17	10:10:10	24.99	-	-
31-MAY-17	16:35:30	149	18-NOV-23	02:59

## PART 2: Deleting rows from the system

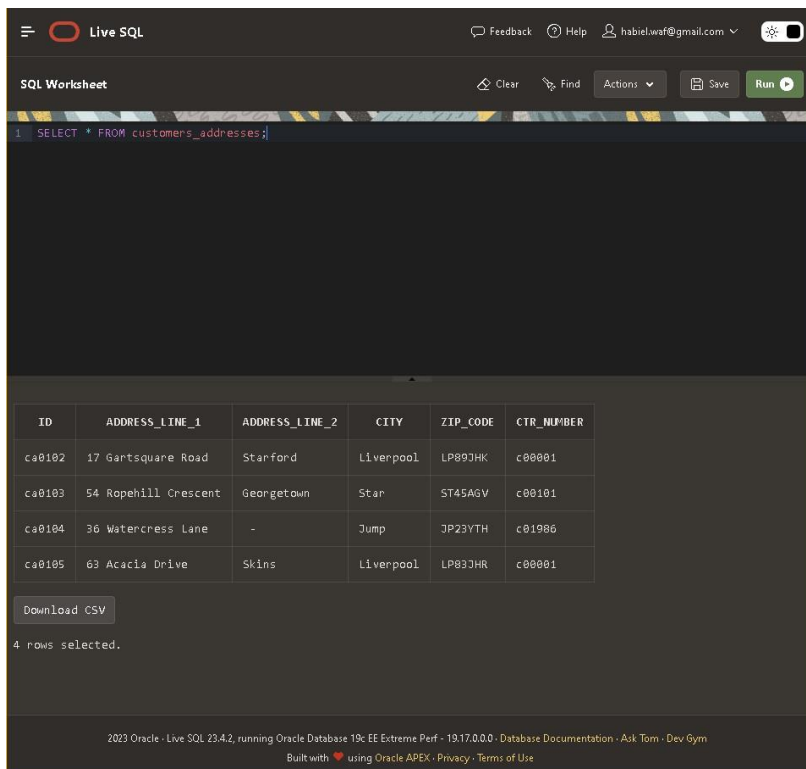
1) DELETE customers\_addresses WHERE id = 'ca0101';



The screenshot shows the Live SQL interface with the SQL Worksheet tab active. The query `DELETE customers_addresses WHERE id = 'ca0101';` is entered in the editor. Below the editor, the output area displays `1 row(s) deleted.` The interface includes a top navigation bar with 'Live SQL', 'Feedback', 'Help', and a user profile. The bottom status bar indicates the database version and provides links to documentation and terms of use.

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2) SELECT \* FROM customers\_addresses;




The screenshot shows the Live SQL interface with the SQL Worksheet tab active. The query `SELECT * FROM customers_addresses;` is entered in the editor. Below the editor, the output area displays a table with 6 columns: ID, ADDRESS\_LINE\_1, ADDRESS\_LINE\_2, CITY, ZIP\_CODE, and CTR\_NUMBER. The table contains 4 rows of data. Below the table, a 'Download CSV' button is visible, followed by the text `4 rows selected.` The interface includes a top navigation bar with 'Live SQL', 'Feedback', 'Help', and a user profile. The bottom status bar indicates the database version and provides links to documentation and terms of use.

ID	ADDRESS_LINE_1	ADDRESS_LINE_2	CITY	ZIP_CODE	CTR_NUMBER
ca0102	17 Gantsquare Road	Stanford	Liverpool	LP89JHK	c00001
ca0103	54 Ropehill Crescent	Georgetown	Star	ST45AGV	c00101
ca0104	36 Watercress Lane	-	Jump	JP23YTH	c01986
ca0105	63 Acacia Drive	Skins	Liverpool	LP833HR	c00001

Download CSV

4 rows selected.

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