

DATABASE SECTION – 03

LAB 1 SQL1-DDL

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DATE : 1 NOVEMBER 2023
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PART 1

1) 10

2) 6

3) NOT NULL

4) customer_pk

5) sales_representatives(commission_rate) – Lowest: -99, Highest: 99

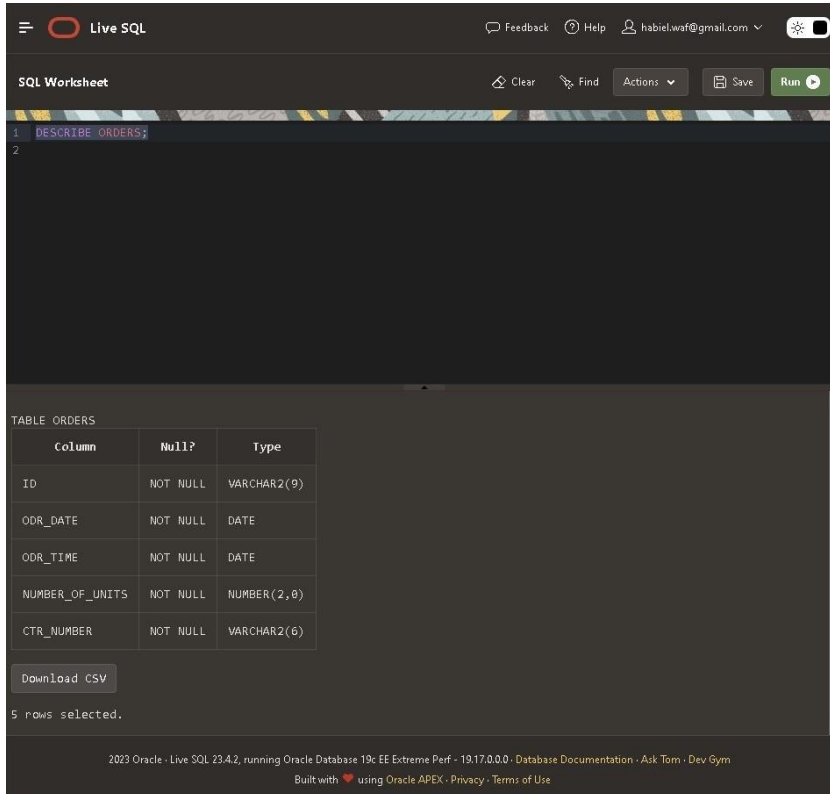
6) price_history(price) – Lowest: -99999.99, Highest: 99999.99

7) 6

PART 2

Modifying a column

1) DESCRIBE ORDERS;




The screenshot shows the Live SQL interface with the SQL Worksheet tab active. The command `DESCRIBE ORDERS;` has been entered and executed. The results show the structure of the `ORDERS` table.

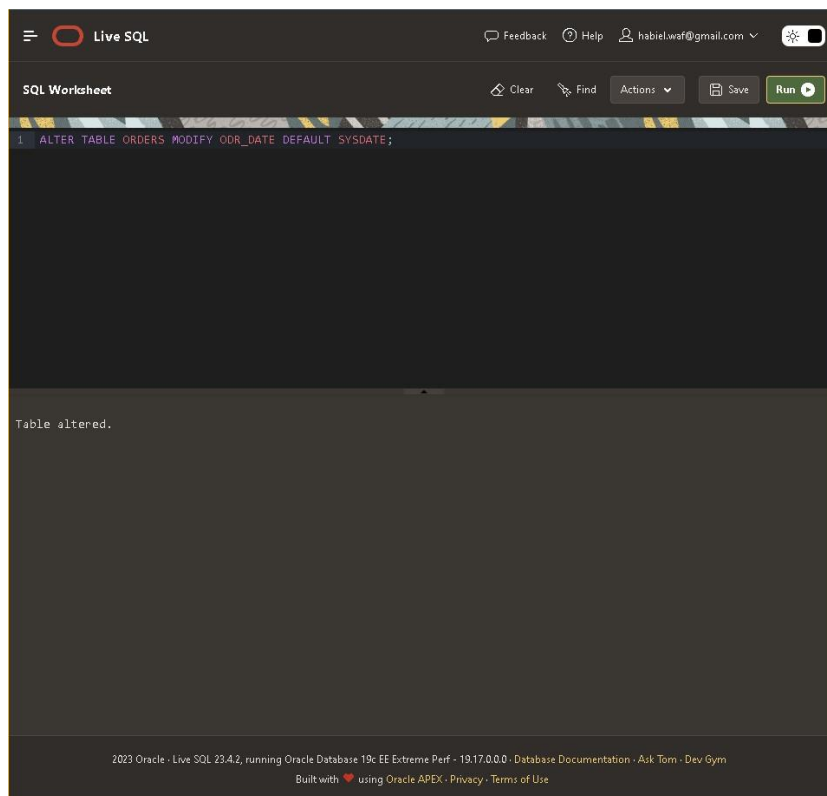
Column	Null?	Type
ID	NOT NULL	VARCHAR2(9)
ODR_DATE	NOT NULL	DATE
ODR_TIME	NOT NULL	DATE
NUMBER_OF_UNITS	NOT NULL	NUMBER(2,0)
CTR_NUMBER	NOT NULL	VARCHAR2(6)

Download CSV

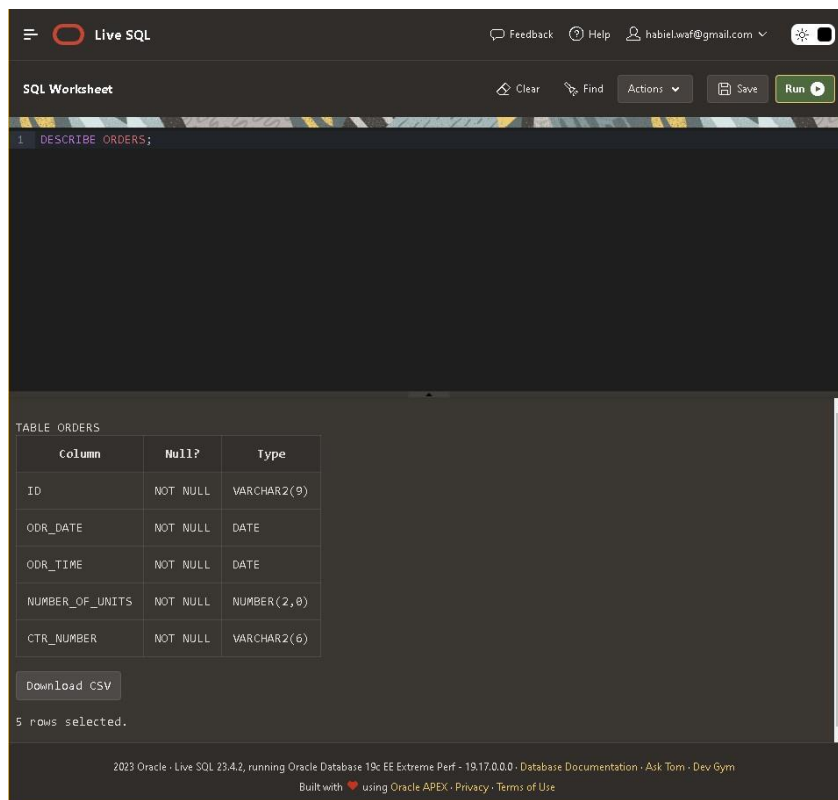
5 rows selected.

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2) ALTER TABLE ORDERS MODIFY ODR_DATE DEFAULT SYSDATE;

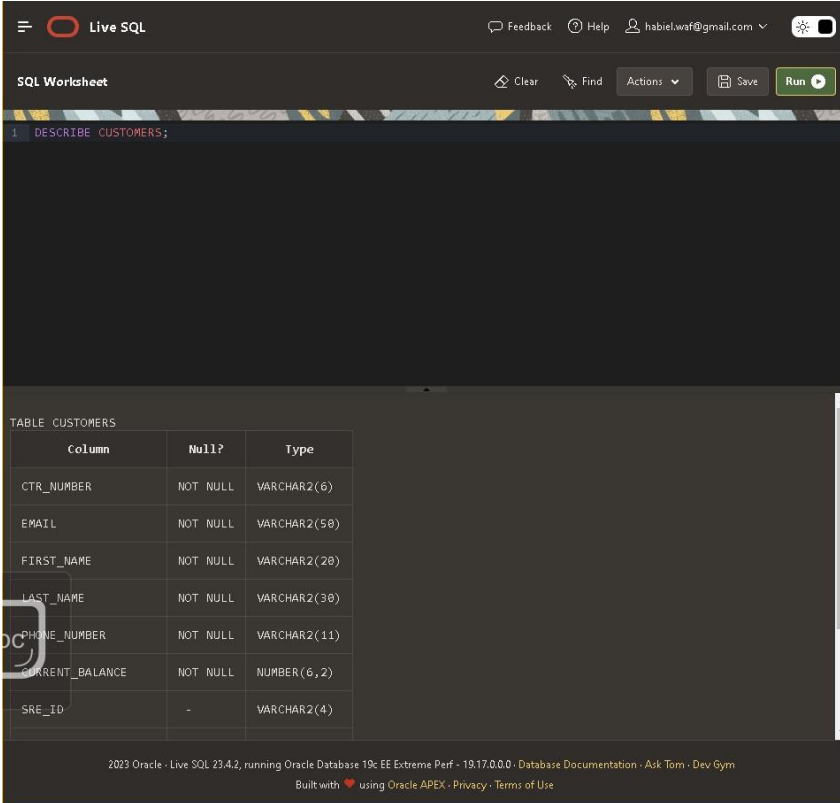


3) DESCRIBE ORDERS;



Adding a check constraint

1) DESCRIBE CUSTOMERS;

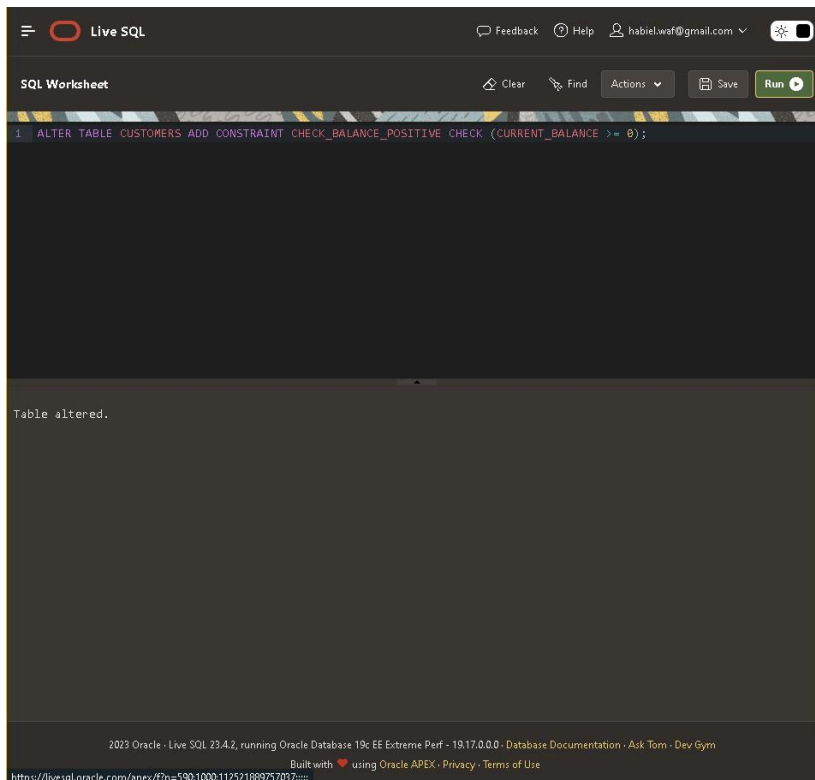


The screenshot shows the Live SQL interface. At the top, there's a navigation bar with a hamburger menu, the Live SQL logo, and links for Feedback, Help, and a user profile (habiel.waf@gmail.com). Below this is a toolbar with buttons for Clear, Find, Actions, Save, and Run. The SQL Worksheet area contains the query `DESCRIBE CUSTOMERS;`. The results section displays the structure of the CUSTOMERS table.

Column	Null?	Type
CTR_NUMBER	NOT NULL	VARCHAR2(6)
EMAIL	NOT NULL	VARCHAR2(50)
FIRST_NAME	NOT NULL	VARCHAR2(20)
LAST_NAME	NOT NULL	VARCHAR2(30)
PHONE_NUMBER	NOT NULL	VARCHAR2(11)
CURRENT_BALANCE	NOT NULL	NUMBER(6,2)
SRE_ID	-	VARCHAR2(4)

At the bottom of the interface, there is a footer with the text: "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. Built with ❤️ using Oracle APEX - Privacy - Terms of Use".

- 2) ALTER TABLE CUSTOMERS ADD CONSTRAINT CHECK_BALANCE_POSITIVE CHECK (CURRENT_BALANCE >= 0);



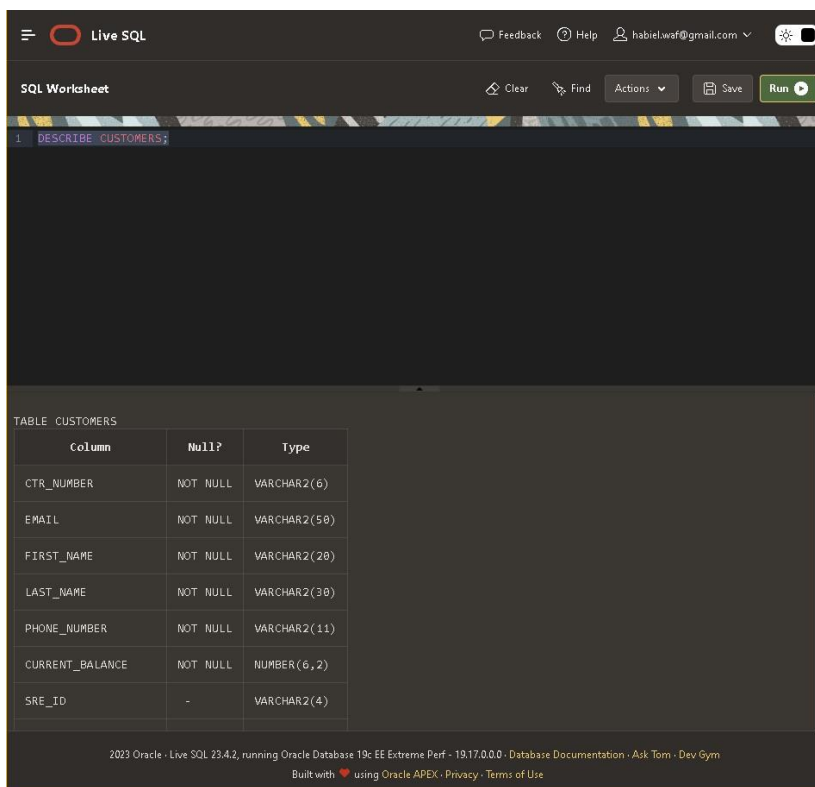
The screenshot shows the Live SQL interface. The SQL Worksheet contains the following statement:

```
1 ALTER TABLE CUSTOMERS ADD CONSTRAINT CHECK_BALANCE_POSITIVE CHECK (CURRENT_BALANCE >= 0);
```

Below the worksheet, the output area displays the message: "Table altered."

At the bottom, the footer indicates: "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. Built with using Oracle APEX - Privacy - Terms of Use. <https://livesql.oracle.com/apex/f?p=590:1000:112521809757037:::>"

- 3) DESCRIBE CUSTOMERS;



The screenshot shows the Live SQL interface. The SQL Worksheet contains the following statement:

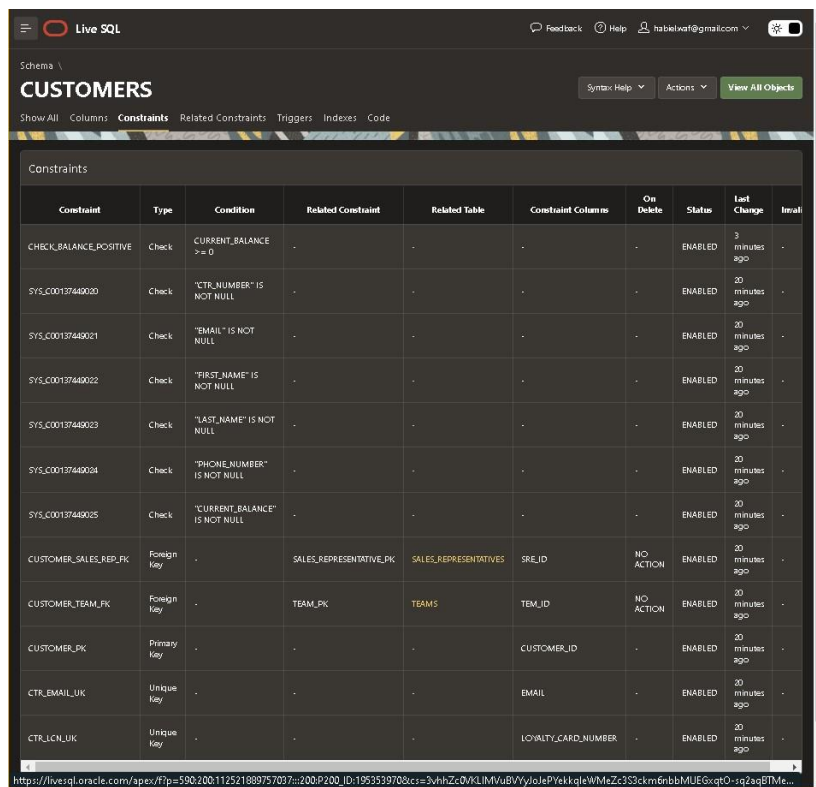
```
1 DESCRIBE CUSTOMERS;
```

Below the worksheet, the output area displays the table structure for CUSTOMERS:

Column	Null?	Type
CTR_NUMBER	NOT NULL	VARCHAR2(6)
EMAIL	NOT NULL	VARCHAR2(50)
FIRST_NAME	NOT NULL	VARCHAR2(20)
LAST_NAME	NOT NULL	VARCHAR2(30)
PHONE_NUMBER	NOT NULL	VARCHAR2(11)
CURRENT_BALANCE	NOT NULL	NUMBER(6,2)
SRE_ID	-	VARCHAR2(4)

At the bottom, the footer indicates: "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. Built with using Oracle APEX - Privacy - Terms of Use."

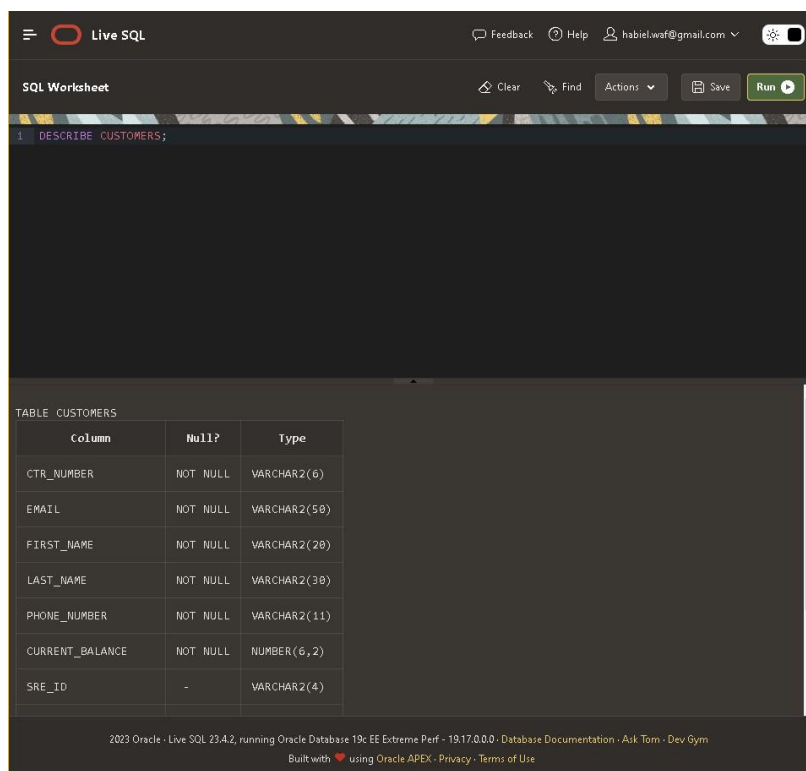
4) Table CUSTOMERS' constraints:



Constraint	Type	Condition	Related Constraint	Related Table	Constraint Columns	On Delete	Status	Last Change	Imali
CHECK_BALANCE_POSITIVE	Check	CURRENT_BALANCE >= 0	-	-	-	-	ENABLED	3 minutes ago	-
SYS_C00137440020	Check	"CTR_NUMBER" IS NOT NULL	-	-	-	-	ENABLED	20 minutes ago	-
SYS_C00137440021	Check	"EMAIL" IS NOT NULL	-	-	-	-	ENABLED	20 minutes ago	-
SYS_C00137440022	Check	"FIRST_NAME" IS NOT NULL	-	-	-	-	ENABLED	20 minutes ago	-
SYS_C00137440023	Check	"LAST_NAME" IS NOT NULL	-	-	-	-	ENABLED	20 minutes ago	-
SYS_C00137440024	Check	"PHONE_NUMBER" IS NOT NULL	-	-	-	-	ENABLED	20 minutes ago	-
SYS_C00137440025	Check	"CURRENT_BALANCE" IS NOT NULL	-	-	-	-	ENABLED	20 minutes ago	-
CUSTOMER_SALES_REP_FK	Foreign Key	-	SALES_REPRESENTATIVE_PK	SALES_REPRESENTATIVES	SRE_ID	NO ACTION	ENABLED	20 minutes ago	-
CUSTOMER_TEAM_FK	Foreign Key	-	TEAM_PK	TEAMS	TEM_ID	NO ACTION	ENABLED	20 minutes ago	-
CUSTOMER_PK	Primary Key	-	-	-	CUSTOMER_ID	-	ENABLED	20 minutes ago	-
CTR_EMAIL_UK	Unique Key	-	-	-	EMAIL	-	ENABLED	20 minutes ago	-
CTR_LCN_UK	Unique Key	-	-	-	LOYALTY_CARD_NUMBER	-	ENABLED	20 minutes ago	-

Adding a column

1) DESCRIBE CUSTOMERS;

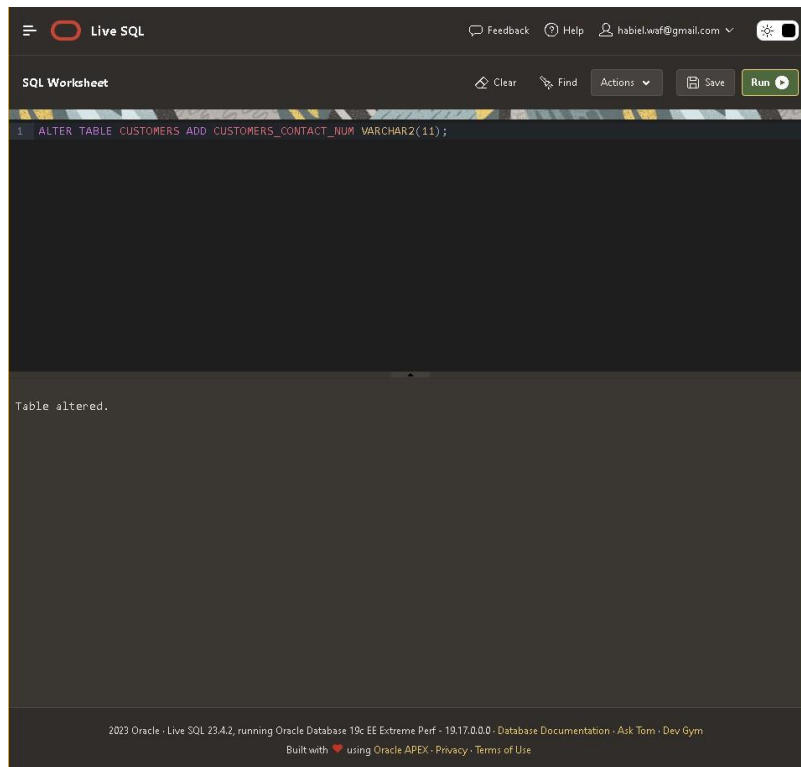


```
DESCRIBE CUSTOMERS;
```

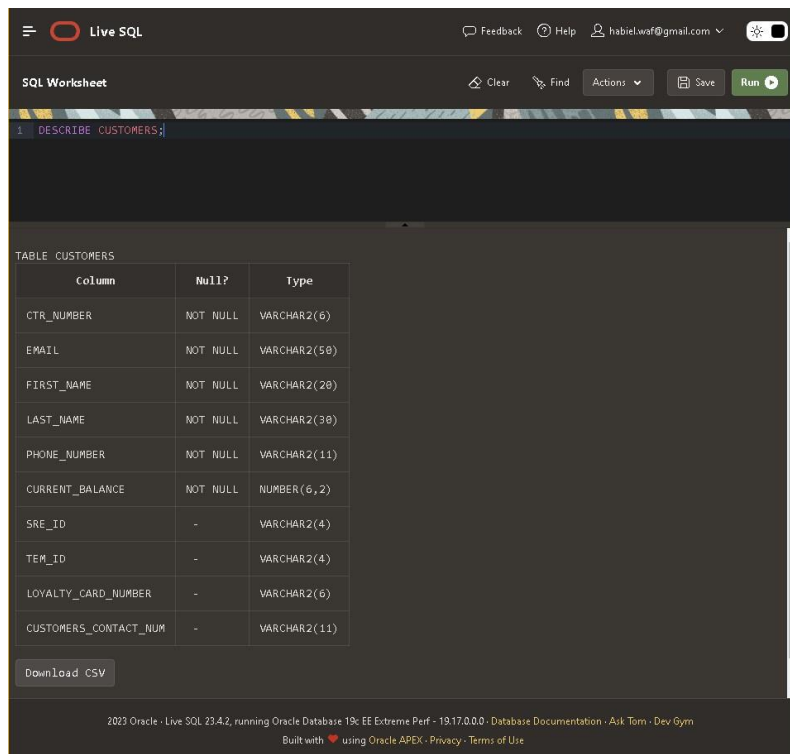
Column	Null?	Type
CTR_NUMBER	NOT NULL	VARCHAR2(6)
EMAIL	NOT NULL	VARCHAR2(50)
FIRST_NAME	NOT NULL	VARCHAR2(20)
LAST_NAME	NOT NULL	VARCHAR2(30)
PHONE_NUMBER	NOT NULL	VARCHAR2(11)
CURRENT_BALANCE	NOT NULL	NUMBER(6,2)
SRE_ID	-	VARCHAR2(4)

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2) ALTER TABLE CUSTOMERS ADD CUSTOMERS_CONTACT_NUM
VARCHAR(11);

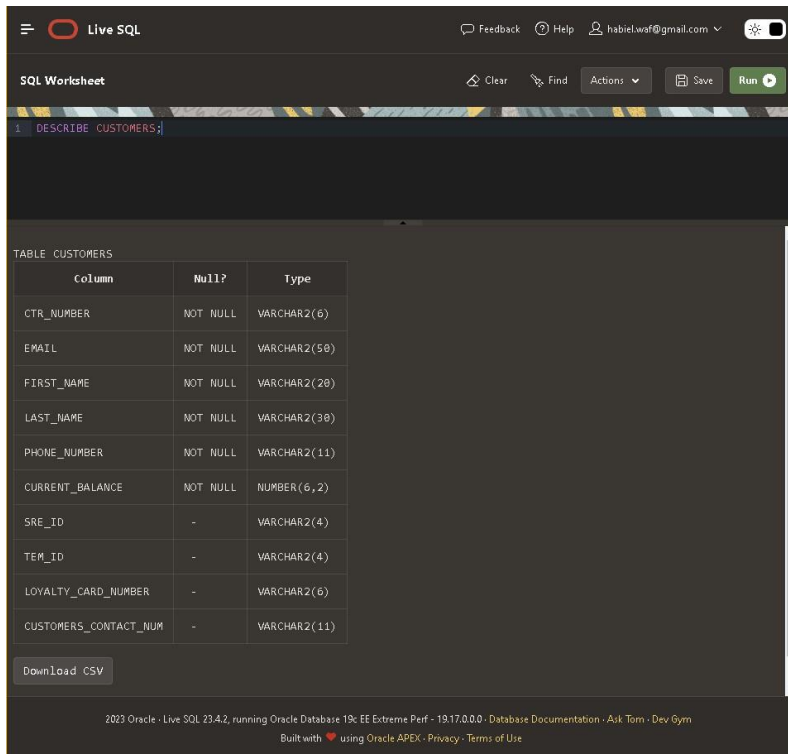


3) DESCRIBE CUSTOMERS;



Dropping a column

1) DESCRIBE CUSTOMERS;

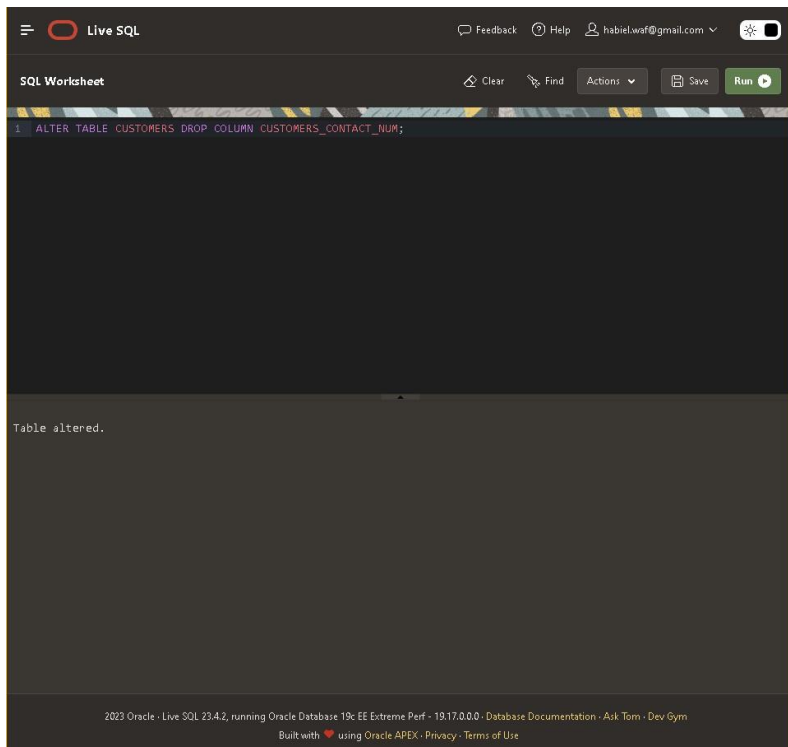


The screenshot shows the Live SQL interface with the SQL Worksheet containing the query `DESCRIBE CUSTOMERS;`. The result is a table titled "TABLE CUSTOMERS" with three columns: Column, Null?, and Type. The table lists the following columns and their properties:

Column	Null?	Type
CTR_NUMBER	NOT NULL	VARCHAR2(6)
EMAIL	NOT NULL	VARCHAR2(50)
FIRST_NAME	NOT NULL	VARCHAR2(20)
LAST_NAME	NOT NULL	VARCHAR2(30)
PHONE_NUMBER	NOT NULL	VARCHAR2(11)
CURRENT_BALANCE	NOT NULL	NUMBER(6,2)
SRE_ID	-	VARCHAR2(4)
TEM_ID	-	VARCHAR2(4)
LOYALTY_CARD_NUMBER	-	VARCHAR2(6)
CUSTOMERS_CONTACT_NUM	-	VARCHAR2(11)

Below the table is a "Download CSV" button. The footer indicates the environment is Oracle Live SQL 23.4.2, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0.

2) ALTER TABLE CUSTOMERS DROP COLUMN CUSTOMERS_CONTACT_NUM;



The screenshot shows the Live SQL interface with the SQL Worksheet containing the query `ALTER TABLE CUSTOMERS DROP COLUMN CUSTOMERS_CONTACT_NUM;`. The result is a single line of text: "Table altered." The footer indicates the environment is Oracle Live SQL 23.4.2, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0.

3) DESCRIBE CUSTOMERS;

Live SQL

SQL Worksheet

DESCRIBE CUSTOMERS;

TABLE CUSTOMERS

Column	Null?	Type
CTR_NUMBER	NOT NULL	VARCHAR2(6)
EMAIL	NOT NULL	VARCHAR2(50)
FIRST_NAME	NOT NULL	VARCHAR2(20)
LAST_NAME	NOT NULL	VARCHAR2(30)
PHONE_NUMBER	NOT NULL	VARCHAR2(11)
CURRENT_BALANCE	NOT NULL	NUMBER(6,2)
SRE_ID	-	VARCHAR2(4)
TEM_ID	-	VARCHAR2(4)
LOYALTY_CARD_NUMBER	-	VARCHAR2(6)

Download CSV

9 rows selected.

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