

1. Query:-

```
CREATE TABLE Station
(ID Number PRIMARY KEY,
CITY CHAR(20),
STATE CHAR(2),
LAT_N Number,
LONG_W Number);
```

Result:-

The screenshot shows the Live SQL web application interface. The top navigation bar includes a hamburger menu, the 'Live SQL' logo, and links for Feedback, Help, and a user profile (krsonu95713@gmail.com). The left sidebar contains a list of navigation items: Home, SQL Worksheet (selected), My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main content area is titled 'SQL Worksheet' and contains a code editor with the following SQL query:

```
1 CREATE TABLE Station
2 (ID Number PRIMARY KEY,
3  CITY CHAR(20),
4  STATE CHAR(2),
5  LAT_N Number,
6  LONG_W Number);
```

Below the code editor, the output area displays the message 'Table created.'

2. Query:-

```
INSERT INTO Station VALUES (13, 'PHOENIX', 'AZ', 33, 112);
INSERT INTO Station VALUES (44, 'DENVER', 'CO', 40, 105);
INSERT INTO Station VALUES (66, 'CARIBOU', 'ME', 47, 68);
```

Result:-

The screenshot shows the Live SQL web application interface with the same navigation elements as the first screenshot. The 'SQL Worksheet' section now contains three SQL queries:

```
1 INSERT INTO Station VALUES (13, 'PHOENIX', 'AZ', 33, 112);
2 INSERT INTO Station VALUES (44, 'DENVER', 'CO', 40, 105);
3 INSERT INTO Station VALUES (66, 'CARIBOU', 'ME', 47, 68);
```

The output area below the code editor shows the results of the three queries, each followed by the message '1 row(s) inserted.'

3. Query:-

SELECT * FROM Station;

Result:-

The screenshot shows the Live SQL web application interface. The top navigation bar includes a hamburger menu, the 'Live SQL' logo, and links for Feedback, Help, and a user profile (krsonu95713@gmail.com). The left sidebar contains navigation options: Home, SQL Worksheet (selected), My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main content area is titled 'SQL Worksheet' and contains a text editor with the query '1 SELECT * FROM Station;'. Below the editor, a table displays the results of the query. The table has five columns: ID, CITY, STATE, LAT_N, and LONG_W. It contains three rows of data. Below the table is a 'Download CSV' button and a status message '3 rows selected.'.

ID	CITY	STATE	LAT_N	LONG_W
13	PHOENIX	AZ	33	112
44	DENVER	CO	40	105
66	CARIBOU	ME	47	68

4. Query:-

SELECT * FROM Station WHERE LAT_N>39.7;

Result:-

The screenshot shows the Live SQL web application interface with the same layout as the previous one. The text editor in the 'SQL Worksheet' section now contains the query '1 SELECT * FROM Station WHERE LAT_N>39.7;'. The results table below it now displays only two rows of data, corresponding to the stations where the latitude is greater than 39.7. The 'Download CSV' button and the status message '2 rows selected.' are also present.

ID	CITY	STATE	LAT_N	LONG_W
44	DENVER	CO	40	105
66	CARIBOU	ME	47	68

5. Query:-

```
CREATE TABLE STATS(  
    ID Number,  
    MONTH Number CHECK (MONTH BETWEEN 1 AND 12), Primary Key (ID, MONTH),  
    TEMP_F Number CHECK (TEMP_F BETWEEN -80 AND 150), --"TEMP_F=Temperature in Fahrenheit"  
    RAIN_I Number CHECK (RAIN_I BETWEEN 0 AND 100) -- "RAIN_I=Rain in Inches"  
);
```

Result:-

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

```
1 CREATE TABLE STATS(  
2     ID Number,  
3     MONTH Number CHECK (MONTH BETWEEN 1 AND 12), Primary Key (ID, MONTH),  
4     TEMP_F Number CHECK (TEMP_F BETWEEN -80 AND 150), --"TEMP_F=Temperature in Fahrenheit"  
5     RAIN_I Number CHECK (RAIN_I BETWEEN 0 AND 100) -- "RAIN_I=Rain in Inches"  
6 );
```

The output pane shows the message: "Table created."

6. Query:-

```
INSERT INTO STATS VALUES (13, 1, 57.4, .31);  
INSERT INTO STATS VALUES (13, 7, 91.7, 5.15);  
INSERT INTO STATS VALUES (44, 1, 27.3, .18);  
INSERT INTO STATS VALUES (44, 7, 74.8, 2.11);  
INSERT INTO STATS VALUES (66, 1, 6.7, 2.1);  
INSERT INTO STATS VALUES (66, 7, 65.8, 4.52);
```

```
SELECT * FROM STATS;
```

Result:-

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

```
1 INSERT INTO STATS VALUES (13, 1, 57.4, .31);  
2 INSERT INTO STATS VALUES (13, 7, 91.7, 5.15);  
3 INSERT INTO STATS VALUES (44, 1, 27.3, .18);  
4 INSERT INTO STATS VALUES (44, 7, 74.8, 2.11);  
5 INSERT INTO STATS VALUES (66, 1, 6.7, 2.1);  
6 INSERT INTO STATS VALUES (66, 7, 65.8, 4.52);  
7  
8 SELECT * FROM STATS;
```

The output pane shows the following results:

```
1 row(s) inserted.  
1 row(s) inserted.  
1 row(s) inserted.  
1 row(s) inserted.  
1 row(s) inserted.  
1 row(s) inserted.  
1 row(s) inserted.
```

ID	MONTH	TEMP_F	RAIN_I
13	1	57.4	.31
13	7	91.7	5.15
44	1	27.3	.18
44	7	74.8	2.11
66	1	6.7	2.1
66	7	65.8	4.52

7. Query:-

```
SELECT CITY, MONTH, TEMP_F FROM STATS  
INNER JOIN  
Station ON STATS.ID=Station.ID
```

Result:-

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

```
1 SELECT CITY, MONTH, TEMP_F FROM STATS  
2 INNER JOIN  
3 Station ON STATS.ID=Station.ID  
4
```

The results are displayed in a table with the following data:

CITY	MONTH	TEMP_F
PHOENIX	1	57.4
PHOENIX	7	91.7
DENVER	1	27.3
DENVER	7	74.8
CARIBOU	1	6.7
CARIBOU	7	65.8

8. Query:-

```
SELECT STATS.ID, MONTH, RAIN_I, TEMP_F, CITY FROM STATS  
INNER JOIN  
Station ON STATS.ID=Station.ID ORDER BY Month, RAIN_I DESC;
```

Result:-

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

```
1 SELECT STATS.ID, MONTH, RAIN_I, TEMP_F, CITY FROM STATS  
2 INNER JOIN  
3 Station ON STATS.ID=Station.ID ORDER BY Month, RAIN_I DESC;  
4
```

The results are displayed in a table with the following data:

ID	MONTH	RAIN_I	TEMP_F	CITY
66	1	2.1	6.7	CARIBOU
13	1	.31	57.4	PHOENIX
44	1	.18	27.3	DENVER
13	7	5.15	91.7	PHOENIX
66	7	4.52	65.8	CARIBOU
44	7	2.11	74.8	DENVER

9. Query:-

```
SELECT MONTH, TEMP_F, CITY, LAT_N FROM STATS  
INNER JOIN  
Station ON STATS.ID=Station.ID WHERE Month=7 ORDER BY TEMP_F;
```

Result:-

The screenshot shows the Live SQL interface. The query is entered in the SQL Worksheet and executed. The result is displayed as a table with 3 rows selected.

MONTH	TEMP_F	CITY	LAT_N
7	65.8	CARIBOU	47
7	74.8	DENVER	40
7	91.7	PHOENIX	33

Download CSV
3 rows selected.

10. Query:-

```
SELECT CITY, MAX(TEMP_F), MIN(TEMP_F), AVG(RAIN_I) FROM STATS  
INNER JOIN  
Station ON STATS.ID=Station.ID GROUP BY CITY;
```

Result:-

The screenshot shows the Live SQL interface. The query is entered in the SQL Worksheet and executed. The result is displayed as a table with 3 rows selected.

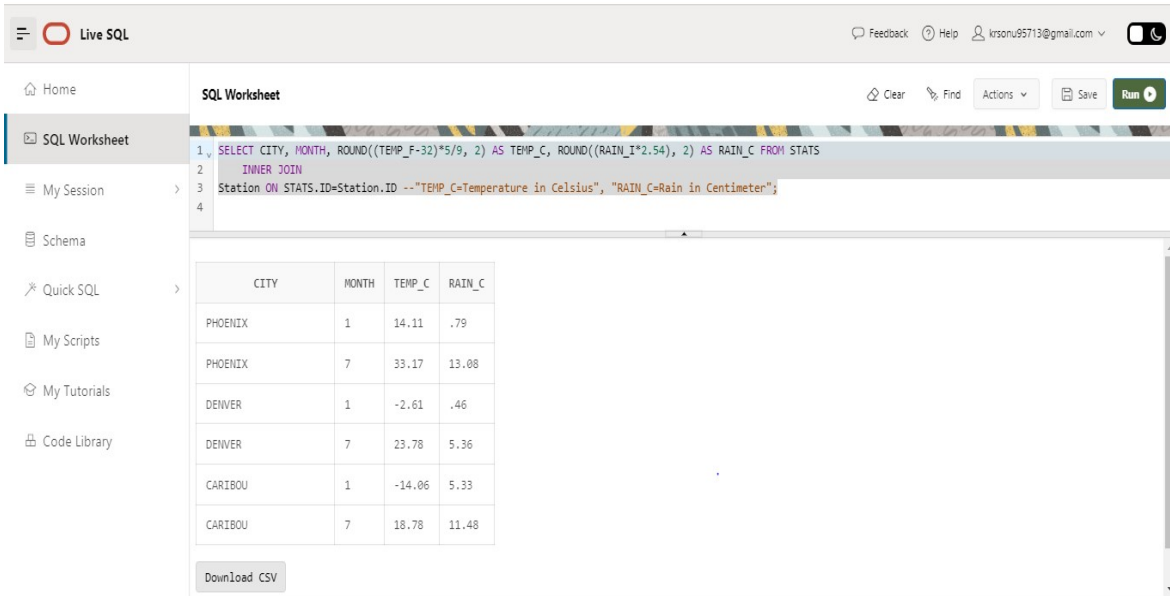
CITY	MAX(TEMP_F)	MIN(TEMP_F)	AVG(RAIN_I)
CARIBOU	65.8	6.7	3.31
DENVER	74.8	27.3	1.145
PHOENIX	91.7	57.4	2.73

Download CSV
3 rows selected.

11. Query:-

```
SELECT CITY, MONTH, ROUND((TEMP_F-32)*5/9, 2) AS TEMP_C, ROUND((RAIN_I*2.54), 2) AS RAIN_C
FROM STATS
INNER JOIN
Station ON STATS.ID=Station.ID --"TEMP_C=Temperature in Celsius", "RAIN_C=Rain in Centimeter";
```

Result:-



The screenshot shows the Live SQL interface with the following query in the SQL Worksheet:

```
1. SELECT CITY, MONTH, ROUND((TEMP_F-32)*5/9, 2) AS TEMP_C, ROUND((RAIN_I*2.54), 2) AS RAIN_C FROM STATS
2. INNER JOIN
3. Station ON STATS.ID=Station.ID --"TEMP_C=Temperature in Celsius", "RAIN_C=Rain in Centimeter";
4.
```

The result is displayed as a table with 6 rows:

CITY	MONTH	TEMP_C	RAIN_C
PHOENIX	1	14.11	.79
PHOENIX	7	33.17	13.08
DENVER	1	-2.61	.46
DENVER	7	23.78	5.36
CARIBOU	1	-14.06	5.33
CARIBOU	7	18.78	11.48

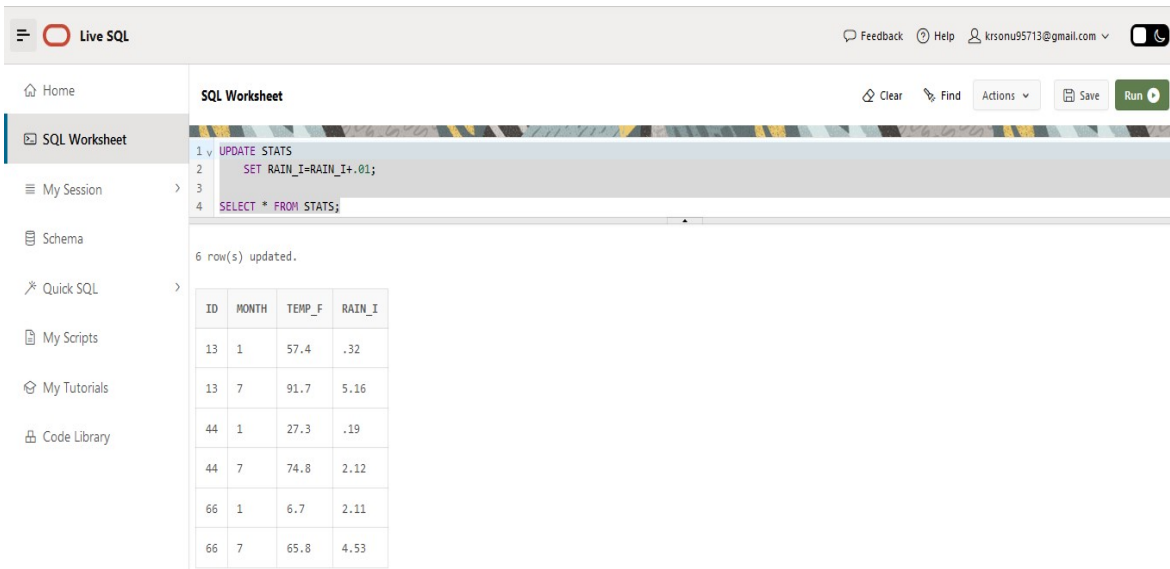
A "Download CSV" button is visible below the table.

12. Query:-

```
UPDATE STATS
SET RAIN_I=RAIN_I+.01;
```

```
SELECT * FROM STATS;
```

Result:-



The screenshot shows the Live SQL interface with the following query in the SQL Worksheet:

```
1. UPDATE STATS
2. SET RAIN_I=RAIN_I+.01;
3.
4. SELECT * FROM STATS;
```

The result is displayed as a message: "6 row(s) updated." followed by a table with 6 rows:

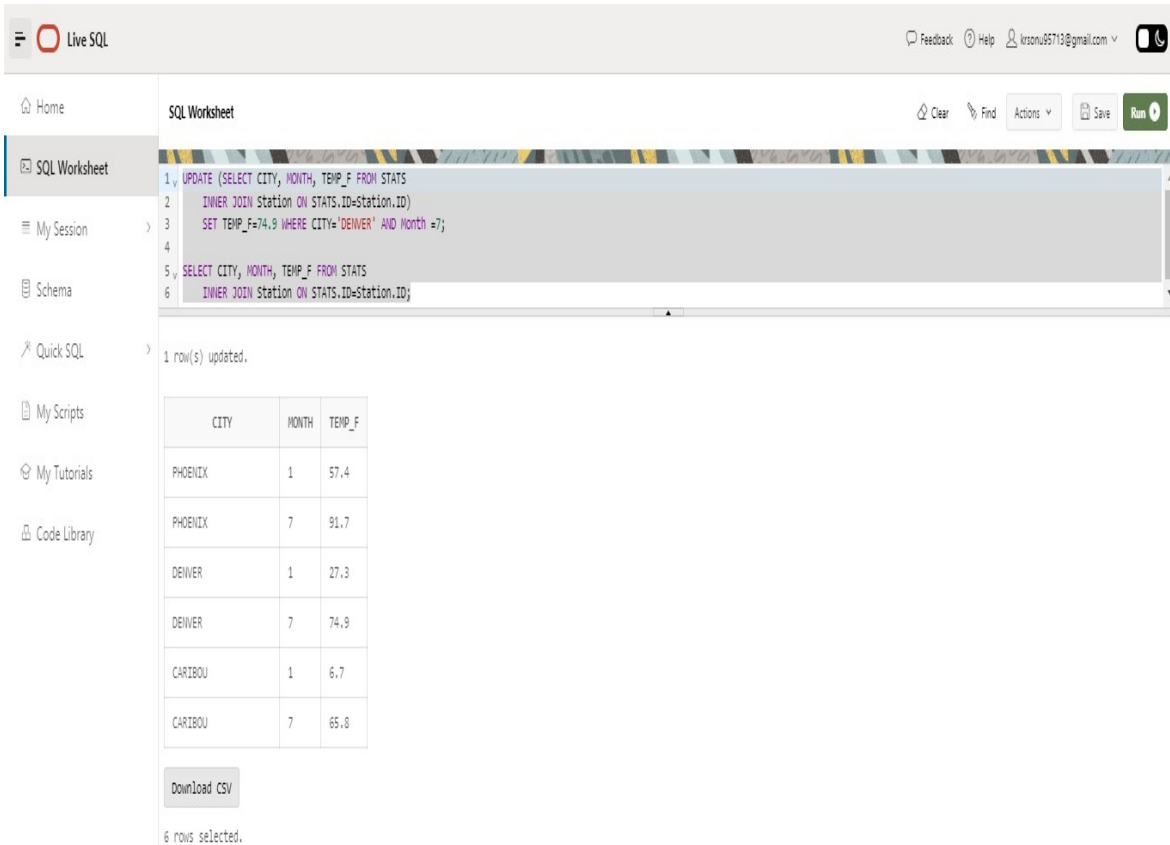
ID	MONTH	TEMP_F	RAIN_I
13	1	57.4	.32
13	7	91.7	5.16
44	1	27.3	.19
44	7	74.8	2.12
66	1	6.7	2.11
66	7	65.8	4.53

13. Query:-

```
UPDATE (SELECT CITY, MONTH, TEMP_F FROM STATS  
        INNER JOIN Station ON STATS.ID=Station.ID)  
SET TEMP_F=74.9 WHERE CITY='DENVER' AND Month =7;
```

```
SELECT CITY, MONTH, TEMP_F FROM STATS  
        INNER JOIN Station ON STATS.ID=Station.ID;
```

Result:-



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

```
1 UPDATE (SELECT CITY, MONTH, TEMP_F FROM STATS  
2     INNER JOIN Station ON STATS.ID=Station.ID)  
3 SET TEMP_F=74.9 WHERE CITY='DENVER' AND Month =7;  
4  
5 SELECT CITY, MONTH, TEMP_F FROM STATS  
6     INNER JOIN Station ON STATS.ID=Station.ID;
```

The execution results show "1 row(s) updated." and a table with the following data:

CITY	MONTH	TEMP_F
PHOENIX	1	57.4
PHOENIX	7	91.7
DENVER	1	27.3
DENVER	7	74.9
CARIBOU	1	6.7
CARIBOU	7	65.8

Below the table, there is a "Download CSV" button and the text "6 rows selected."