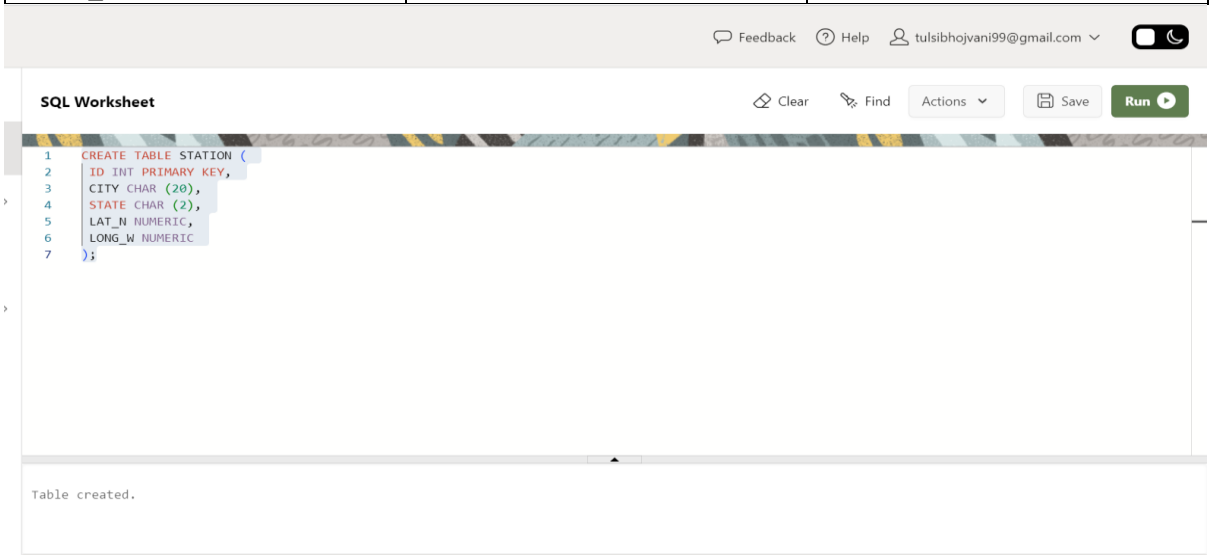
ID	NUMBER	PRIMARY KEY
CITY	CHAR (20)	
STATE	CHAR(2)	
LAT_N	NUMBER	
LONG_W	NUMBER	



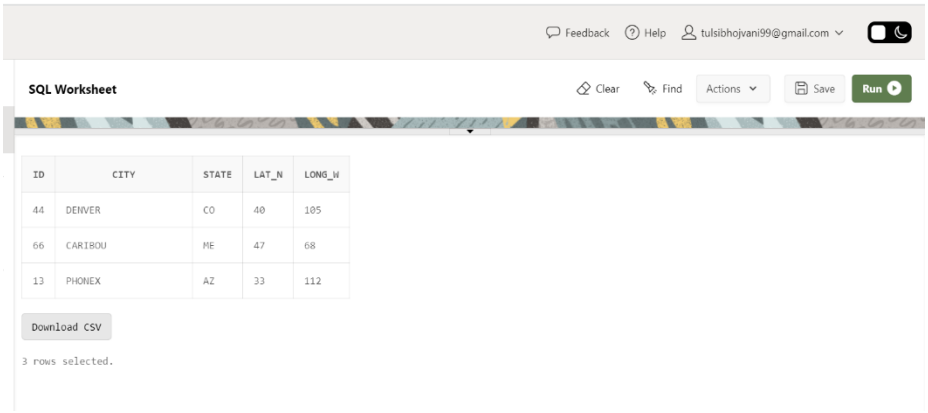
2. INSERT THE FOLLOWING RECORDS INTO THE TABLE.

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

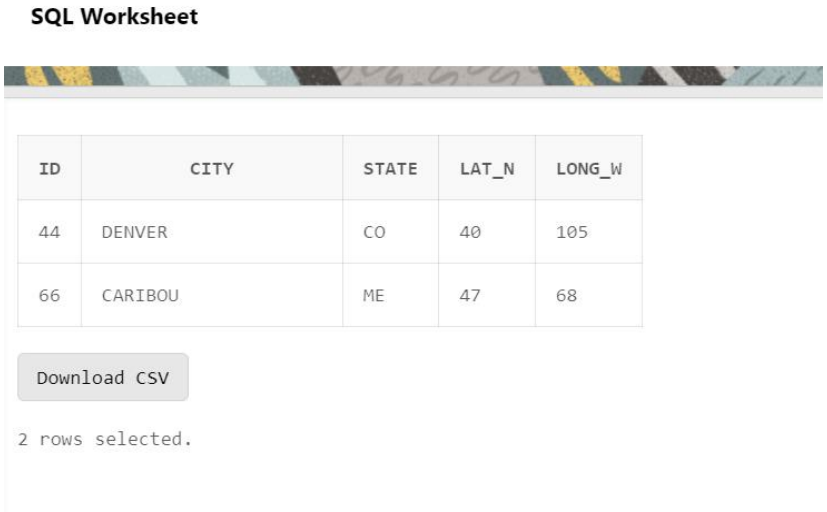
```
1  INSERT INTO STATION VALUES (13,'PHONEX','AZ',33,112);
2  INSERT INTO STATION VALUES (44,'DENVER','CO',40,105);
3  INSERT INTO STATION VALUES (66,'CARIBOU','ME',47,68);
```

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

3. EXECUTE A QUERY TO LOOK AT TABLE STATION IN UNFINED ORDER.



4. EXECUTE A QUERY TO SELECT NORTHERN STATION (NORTHERN LATITUDE>39.7).



5. CREATE ANOTHER TABLE, STATS , TO STORE NORMALIZED TEMPRATURE AND PARTIATION DATA.

COLUMN	DATA TYPE	REMARK
ID	NUMBER	MUST MATCH SOME STATION TABLE ID (SO NAME AND LOCATION WILL BE KNOWN)

MONTH	NUMBER	RANGE BETWEEN 1 AND 12
TEMP_F	NUMBER	IN FARANHIT DEGREES,RANGE BETWEEN, -80 TO 150
RAIN_I	NUMBER	IN INCHES,RANGE BETWEEN O AND 100

SQL Worksheet

```
1   CREATE TABLE STATS
2   (ID NUMBER,
3   MONTH NUMBER CHECK(MONTH BETWEEN 1 AND 12),
4   TEMP_F NUMBER CHECK(TEMP_F BETWEEN -80 AND 150),
5   RAIN_I NUMBER CHECK(RAIN_I BETWEEN 0 AND 100) ,
6   FOREIGN KEY (ID) REFERENCES STATION (ID)
7   );
```

```
Table created.
```

6. POPULATE THE TABLE STATS WITH SOME STATISTIC FOR JANUARY AND JULY

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

SQL Worksheet

```
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)
```

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

7. EXECUTE A QUERY TO DISPLAY TEMPRATURE STATS (FROM STATS TABLE)FOR EACH (FROM STATION TABLE

```
1   SELECT CITY,TEMP_F FROM STATION, STATS ORDER BY MONTH DESC,RAIN_I DESC
```

CARIBOU	91.7
DENVER	91.7
PHONEX	91.7
CARIBOU	65.8
DENVER	65.8
PHONEX	65.8
DENVER	74.8
CARIBOU	74.8
PHONEX	74.8
PHONEX	6.7

CARIBOU	6.7
DENVER	6.7
DENVER	57.4
PHONEX	57.4
CARIBOU	57.4
CARIBOU	27.3
PHONEX	27.3
DENVER	27.3

Download CSV

18 rows selected.

8. EXECUTE A QUERY TO LOOK AT THE TABLE STATS ORDERD BY MONTH AND GRATEST RAINFALL, WITH COLUMS REARRANGED . IT SHOULD ALSO SHOW THE CORSSPONDING CITIES

SQL Worksheet

```
1   SELECT MONTH,CITY,RAIN_I
2   FROM STATS, STATION
3   ORDER BY MONTH;
```

MONTH	CITY	RAIN_I
1	PHONEX	.18
1	PHONEX	.31
1	DENVER	.31
1	PHONEX	2.1
1	DENVER	.18
1	CARIBOU	2.1
1	CARIBOU	.18
1	CARIBOU	.31
1	DENVER	2.1
7	PHONEX	4.52
7	PHONEX	2.11
7	PHONEX	5.15
7	CARIBOU	4.52
7	CARIBOU	2.11
7	CARIBOU	5.15
7	DENVER	4.52
7	DENVER	5.15
7	DENVER	2.11

9. EXECUTE A QUERY TO LOOK AT TEMPRATURE FOR JULY FROM TABLE STATS,LOWEST TEMPRATURE FIRST,PICKING UP CITY NAME AND LATITUDE

```
SELECT LAT_N,CITY,TEMP_F
FROM STATS, STATION
WHERE MONTH = 7
AND STATS.ID = STATION.ID
ORDER BY TEMP_F
```

LAT_N	CITY	TEMP_F
47	CARIBOU	65.8
40	DENVER	74.8
33	PHONEX	91.7

Download CSV

3 rows selected.

10. EXECUTE A QUERY TO SHOW MAX AND MIN TEMPRATURE AS WELL AS AVRAGE RAINFALL FOR EACH CITY .

```
SELECT MAX (TEMP_F),MIN(TEMP_F),
AVG(RAIN_I), ID
FROM STATS
GROUP BY ID
```

MAX(TEMP_F)	MIN(TEMP_F)	AVG(RAIN_I)	ID
74.8	27.3	1.145	44
65.8	6.7	3.31	66
91.7	57.4	2.73	13

11. EXECUTE A QUERY TO DISPLAY EACH CITY'S MONTHLY TEMPRATURE IN CELCIUS AND RAINFALL IN CENTIMETER.

```
CREATE VIEW METRIC_STATS (ID,
MONTH,TEMP_C,RAIN_C)AS
SELECT ID,
MONTH,
(TEMP_F - 32)*5/9,
RAIN_I*0.3937
FROM STATS;
```

```
View created.
```

12. UPDATE ALL ROWS OF TABLE STATS TO COMPENSATE FOR FAULTY RAIN GAUGES KNOWN TO READ 0.01 INCHES LOW

```
UPDATE STATS SET RAIN_I = RAIN_I + 0.01
```

```
6 row(s) updated.
```

ID	MONTH	TEMP_F	RAIN_I
13	1	57.4	.4
13	7	91.7	5.24
44	1	27.3	.27
44	7	74.9	2.2
66	1	6.7	2.19
66	7	65.8	4.61

13 UPDATE DENVERTS JULY TEMPRATURE READING AS 74.9.

```
1  UPDATE STATS SET TEMP_F = 74.9
2  WHERE ID = 44
3  AND MONTH = 7;
4
```

```
5 row(s) updated.
```

SQL Worksheet

ID	MONTH	TEMP_F	RAIN_I
13	7	91.7	5.26
44	7	74.9	2.22
66	7	65.8	4.63
13	1	57.4	.42
44	1	27.3	.29
66	1	6.7	2.21