

Pratik Dey

Sunny.dey17@gmail.com

Business analyst

SQL assignment

```
1 • create database Temp_region;
2 • use Temp_region;
3
4 -- Q1 Assignment-SQL[Major]Q1>Create a table "STATION" to store information about weather observation stations
5 • create table STATION (
6   ID int primary key,
7   CITY char(20),
8   STATE char(2),
9   LAT_N int,
10  LONG_W int
11 );
```

```
12
13 -- Q2
14 • insert into station values (13,"PHOENIX","AZ",33,112),(44,"DENVER","CO",40,105),
15   (66,"CARIBOU","ME",47,68);
16
```

```
16
17 -- Q3
18 • select * from station;
```

Result Grid						Filter Rows:		Edit:		Export/Import:		Wrap Cell Content:	
	ID	CITY	STATE	LAT_N	LONG_W								
▶	13	PHOENIX	AZ	33	112								
	44	DENVER	CO	40	105								
	66	CARIBOU	ME	47	68								
•	NULL	NULL	NULL	NULL	NULL								

```

22 -- Q4 Northernlatitude>39.7
23 • select * from station where lat_n>39.7;
24

```

Result Grid					
Filter Rows:					
Edit: Export/Import					
ID	CITY	STATE	LAT_N	LONG_W	
44	DENVER	CO	40	105	
66	CARIBOU	ME	47	68	
NULL	NULL	NULL	NULL	NULL	

```

25 -- Q5
26 • create table stats (
27     ID int,
28     MONTH int,
29     TEMP_F int,
30     RAIN_I int);
31
32 -- Q6
33 • insert into stats values(13,1,57.4,0.31),(13,7,91.7,5.15),(44,1,27.3,0.18),(44,7,74.8,2.11),
34     (66,1,6.7,2.1),(66,7,65.8,4.52);
35 • select * from stats;
36

```

Result Grid					
Filter Rows:					
Export: Wrap Cell Content:					
ID	MONTH	TEMP_F	RAIN_I		
13	1	57	0		
13	7	92	5		
44	1	27	0		
44	7	75	2		
66	1	7	2		

```

37 -- Q7 Executequerytodisplaytemperaturestats(fromtheSTATStable)foreachcity(fromtheSTATIONtable).
38 • select station.city , stats.temp_f from station left join stats on station.id=stats.id ;

```



Result Grid					
Filter Rows:					
Export: Wrap Cell Content:					
city	temp_f				
PHOENIX	92				
PHOENIX	57				
DENVER	75				
DENVER	27				
CARIBOU	66				
CARIBOU	7				


```


40 -- Q8 Execute a query to look at the table STATS, ordered by month and greatest rain fall, with columns rearranged.
41 -- It should also show the corresponding cities.
42 • select stats.id, stats.month, stats.temp_f, stats.rain_i , station.city from stats left join station
43 on stats.id=station.id order by MONTH and RAIN_I desc;
44

```

Result Grid



Filter Rows:

Export:


Wrap Cell Content:



	id	month	temp_f	rain_i	city
▶	13	7	92	5	PHOENIX
	44	7	75	2	DENVER
	66	1	7	2	CARIBOU
	66	7	66	5	CARIBOU
	13	1	57	0	PHOENIX
	44	1	27	0	DENVER


```


45 -- Q9 Execute a query to look at temperatures for July from table STATS, lowest temperatures first, picking up city name and latitude.
46 • select stats.temp_f , station.city, station.lat_N from station left join stats
47 on stats.id=station.id order by stats.temp_f ;

```

Result Grid

 Filter Rows:

Export: 

Wrap Cell Content: 

	temp_f	city	lat_N
▶	7	CARIBOU	47
	27	DENVER	40
	57	PHOENIX	33
	66	CARIBOU	47
	75	DENVER	40
	92	PHOENIX	33

```

48 -- Q10 Execute a query to show MAX and MIN temperatures as well as average rain fall for each city.
49 • select max(temp_f) , min(temp_f) , avg(rain_i) , station.city from stats left join station
50 on stats.id=station.id group by station.city
51

```

Result Grid	Filter Rows:	Export:	Wrap Cell Content:
max(temp_f)	min(temp_f)	avg(rain_i)	city
92	57	2.5000	PHOENIX
75	27	1.0000	DENVER
66	7	3.5000	CARIBOU

```

52 -- Q11 Execute a query to display each city's monthly temperature in Celsius and rainfall in Centimeter.
53 create view new_stats as select id, month, ((temp_f-32) * 5/9) as temp_c, (rain_i*0.3937) as rain_c
54 from stats;
55 select *, station.city from new_stats left join station on new_stats.id=station.id;

```


Result Grid   Filter Rows: Export:  Wrap Cell Content: 

	id	month	temp_c	rain_c	ID	CITY	STATE	LAT_N	LONG_W	city
▶	13	1	13.8889	0.0000	13	PHOENIX	AZ	33	112	PHOENIX
	13	7	33.3333	1.9685	13	PHOENIX	AZ	33	112	PHOENIX
	44	1	-2.7778	0.0000	44	DENVER	CO	40	105	DENVER
	44	7	23.8889	0.7874	44	DENVER	CO	40	105	DENVER
	66	1	-13.8889	0.7874	66	CARIBOU	ME	47	68	CARIBOU
	66	7	18.8889	1.9685	66	CARIBOU	ME	47	68	CARIBOU

```

58 -- Q12 Update all rows of table STATs to compensate for faulty rain gauges known to read 0.01 inches low
59 update stats set rain_i=rain_i+0.01;
60 set sql_safe_updates=0;
61 select * from stats;

```


Result Grid   Filter Rows: Export:  Wrap Cell Content: 

	ID	MONTH	TEMP_F	RAIN_I
▶	13	1	57	0
	13	7	92	5
	44	1	27	0
	44	7	75	2
	66	1	7	2
	66	7	66	5

```

63 -- Q13 Update Denver's July temperature reading as 74.9
64 update stats set temp_f=74.9 where id=13 and month=7;
65 select * from stats
66

```

Result Grid   Filter Rows: Export:  Wrap Cell Content: 

	ID	MONTH	TEMP_F	RAIN_I
▶	13	1	57	0
	13	7	75	5
	44	1	27	0
	44	7	75	2
	66	1	7	2
	66	7	66	5

