

## **Assignment - SQL [Major]**

Grading				
Event	Decoding Skills	Number of question not attempted	Overall Output	
<u>Assignment</u>	<ul> <li>0- If the learner does not submit the assignment or if he tries to attempt it but the applied hypothesis is wrong or showing an error.</li> <li>10- If the learner clearly decodes the given data set or questions by performing the tasks defined in the question</li> </ul>	0 - If the learner does not solve any questions or solves less than 40% of the assignment correctly.  5 - If the learner successfully solves between 40-80% of the given questions.  10- If the learner solves 80-100% of the questions correctly	O-If the output presented is completely wrong.  5- If the given output is partially correct along with incorrect presentation.  10- If all the answers are attempted correctly along with presentation skills	

## 1. Create a table "Station" to store information about weather observation stations:

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	со	40	105
66	CARIBOU	ME	47	68

- 3. Execute a query to look at table STATION in undefined order.
- 4. Execute a query to select Northern stations (Northern latitude > 39.7).
- 5. Create another table, 'STATS', to store normalized temperature and precipitation data:

Column	Data type	Remark
ID	Number	must match some STATION table ID(so name & location will be known).
MONTH	Number	Range between 1 and 12
TEMP_F	Number	in Fahrenheit degrees,Range between -80 and 150
RAIN_I	Number	in inches, Range between 0 and 100

There will be no Duplicate ID and MONTH combination.



6. Populate the table STATS with some statistics 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

- 7. Execute a query to display temperature stats (from STATS table) for each city (from Station table).
- 8. Execute a query to look at the table STATS, ordered by month and greatest rainfall, with columns rearranged. It should also show the corresponding cities.
- 9. Execute a query to look at temperatures for July from table STATS, lowest temperatures first, picking up city name and latitude.
- 10. Execute a query to show MAX and MIN temperatures as well as average rainfall for each city.
- 11. Execute a query to display each city's monthly temperature in Celcius and rainfall in Centimeter.
- 12. Update all rows of table STATS to compensate for faulty rain gauges known to read 0.01 inches low.
- 13. Update Denver's July temperature reading as 74.9



In the answer sheet, insert the query and the screenshot of the resultant output.

## **Major Assignment Telegram Group**

**CLICK HERE** to join the "**PROJECT ROOM**" of this assignment:

## What is "PROJECT ROOM"?

A "PROJECT ROOM" is a telegram discussion group with all your fellow-learners. The aim of this group is for you to discuss the assignment with your peers and come up with better solutions.

Please note that,

- It is mandatory to join this group
- No other discussion, other than this assignment is allowed in the group.