

Assignment - SQL [Major]

Grading			
Event	Decoding Skills	Number of question not attempted	Overall Output
<u>Assignment</u>	<p>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.</p> <p>10- If the learner clearly decodes the given data set or questions by performing the tasks defined in the question</p>	<p>0 - If the learner does not solve any questions or solves less than 40% of the assignment correctly.</p> <p>5 - If the learner successfully solves between 40-80% of the given questions.</p> <p>10- If the learner solves 80-100% of the questions correctly</p>	<p>0-If the output presented is completely wrong.</p> <p>5- If the given output is partially correct along with incorrect presentation.</p> <p>10- If all the answers are attempted correctly along with presentation skills</p>

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	CO	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.

Process for Submission

Please upload your assignment files via this [Google-form](#) before the deadline (8th November, 2022 11:59 pm). Upload a PDF or Word document with file name as **Assignment - SQL [Major] by <your-name>**

Steps to submit the assignment:

1. Open the [Google-form](#).
2. Enter the required information.
3. Upload the assignment file by clicking the **Add file** button.

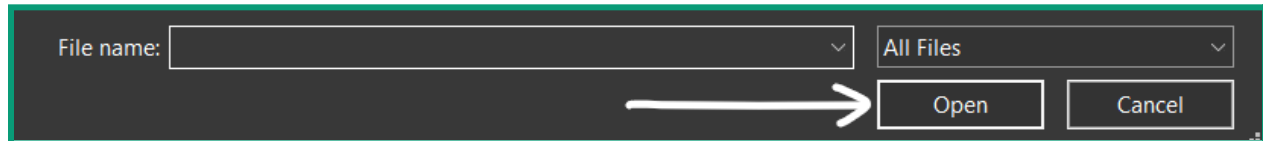
A rectangular button with a light blue border. Inside, there is a blue icon of an upward-pointing arrow and the text "Add file" in blue.A large rectangular area with a light gray background and a thin gray border. In the center, the text "Drag files here" is displayed in a medium gray font.

— or —

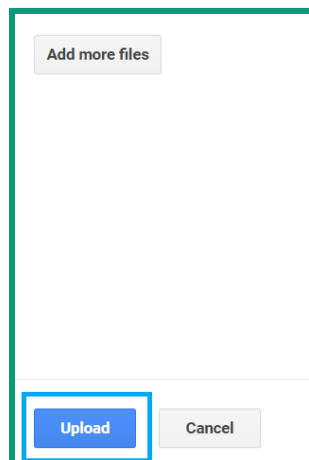
A small rectangular button with a light blue border and the text "Select files from your device" in a small, dark gray font.

4. You can upload the file by clicking **Select file** from your device or *by dragging the file and dropping it in the window opened.*

5. Select your assignment file and click the **Open** button.



6. After selecting the file click on the **Upload** button.



7. Once the file is uploaded, click on the **Submit** button.

