# Assignment - SQL [Major]

| Grading Parameter | Marks |
|---|---|
| Table Design | 10 |
| Data Insertion | 10 |
| Query Execution | 10 |
| Data Normalization | 10 |
| Data Population | 10 |
| Total | 50 |

**Q1)** 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 | |

**Q2)** 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 |

**Q3)** Execute a query to look at table **STATION** in undefined order.

**Q4)** Execute a query to select Northern stations
(**Northern latitude > 39.7**).

**Q5)** Create another table, **'STATS'**, to store normalized temperature and precipitation data:

| Column | Data type | Remark |
|--------|-----------|--------|
| ID | Number | **ID** must match with some **ID** from the **STATION** table(so name & location will be known). |
| MONTH | Number | The range of months is between (**1 and 12**) |
| TEMP_F | Number | Temperature is in Fahrenheit degrees, Ranging between (**-80 and 150**) |
| RAIN_I | Number | Rain is in inches, Ranging between (**0 and 100**) |

There will be no Duplicate **ID** and **MONTH** combination.

**Q6)** 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 |

**Q7)** Execute a query to display temperature stats (from the **STATS** table) for each city (from the **STATION** table).

**Q8)** 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.

**Q9)** Execute a query to look at temperatures for **July** from table **STATS**, lowest temperatures first, picking up **city name** and **latitude**.

**Q10)** Execute a query to show **MAX** and **MIN** temperatures as well as average rainfall for each city.

**Q11)** Execute a query to display each city's monthly temperature in **Celcius** and rainfall in **Centimeter**.

**Q12)** Update all rows of table **STATS** to compensate for faulty rain gauges known to read 0.01 inches low.

**Q13)** Update **Denver's July** temperature reading as **74.9**.

# **Steps To submit an SQL assignment.**

**Step 1:** **Organize Your Work**

Before you start, ensure that you have completed the SQL assignment and have screenshots of each query's output ready.

**Step 2:** **Create a New Word Document**

**1)** Open Microsoft Word or any word processing software.

**2)** Create a new document and give it a suitable title, such as "**SQL Assignment Submission - (Your Name)**"

**Step 3:** **Add Headers and Question Numbers**

**1)** Insert a header at the top of the page containing your name, E-mail, course name, and assignment title.

**2)** Begin each assignment question with a clear label or question number to distinguish them.

**Step 4:** **Add Screenshots of Queries and Outputs for each question in the assignment:**

**1)** Type the question number and description.

**2)** Take a screenshot of your SQL query.

**3)** Paste the screenshot into the Word document.

**4)** Take a screenshot of the query output (result set).

**5)** Paste the screenshot of the output below the query screenshot.

**Step 5**: **Formatting and Alignment**

**1)** Format the text and images for clarity and neatness.

**2)** Ensure that screenshots are clear and readable. Resize images if necessary.

**3)** Align the screenshots and text properly for each question.

**Step 6: Review Your Document**

**1)** Review the document to make sure all questions, queries, and output screenshots are correctly arranged.

**2)** Double-check for any typos or formatting issues.

**Step 7: Save Your Document**

**1)** Click on the "**File**" menu in Word.

**2)** Select "**Save As**."

**3)** Choose a location on your computer where you want to save the document.

**4)** Enter a file name for the document and select "**Save**."

**Step 8**: **Convert to PDF**

Now, let's convert your Word document into a PDF file.

**1)** If you have Microsoft Word with a "Save As PDF" option:

- In the "**File**" menu, select "**Save As**."

- Choose a location to save the PDF file.

- In the "**Save as type**" dropdown, select "**PDF**."

- Click "**Save**."

**2)** If you don't have the "**Save As PDF**" option:

   - Open your Word document.

   - Click "**File**" > "**Print**."

   - Choose a PDF printer or select "**Microsoft Print to PDF**."

   - Click "**Print**" and choose a location to save the PDF.

**Step 9: Upload and Submit**

**1)** Visit your assignment submission platform or email your instructor, depending on the submission method.

**2)** Locate the option to upload your assignment.

**3)** Upload the PDF file of your assignment.

**Step 10: Confirm Submission**

After uploading, make sure to confirm that your assignment has been successfully submitted.

**Following these steps will ensure you create a well-organized submission of your SQL assignment.**
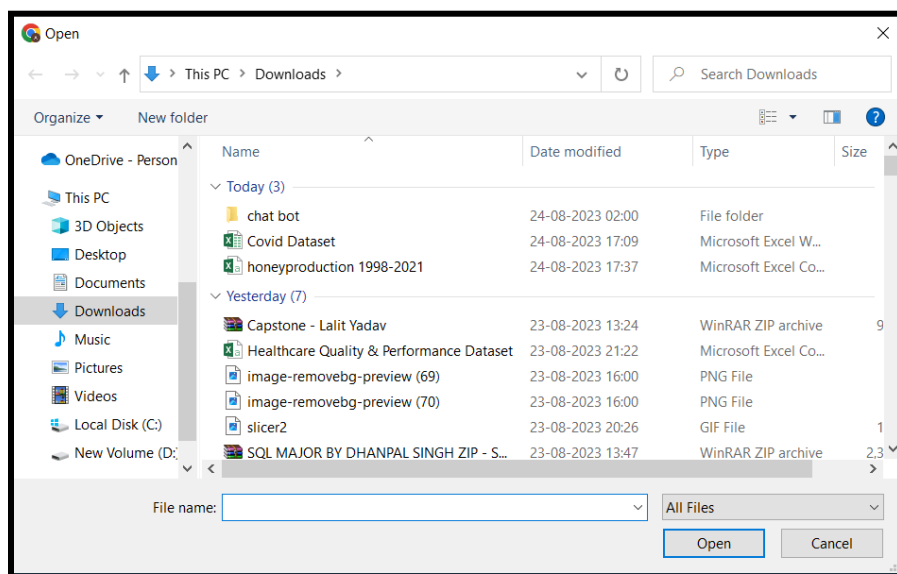
# How To Zip Your File & Submit Assignments

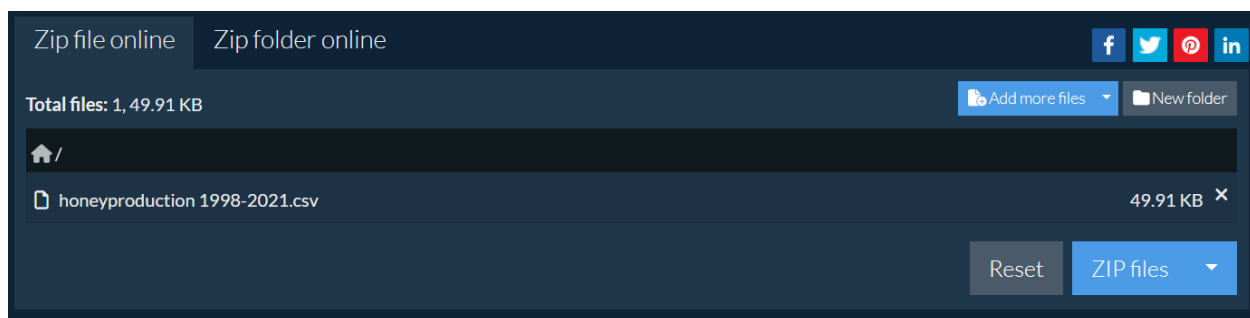**Step 1:** Open the **Ezyzip Website** on your Web Browser
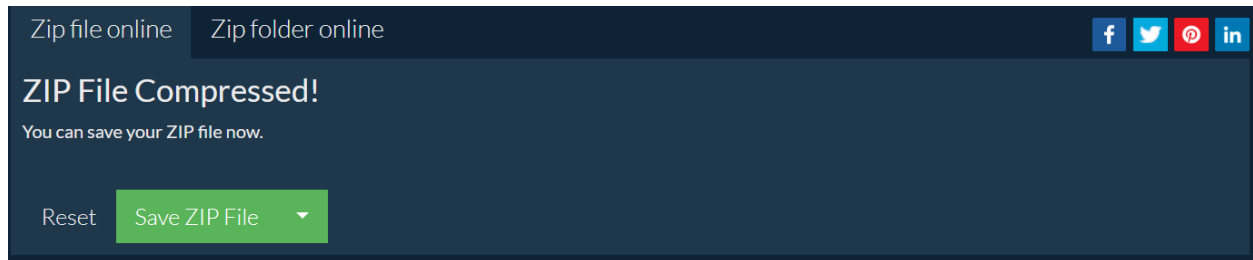
**Step 2:** Click on "Select files to archive"



**Step 3:** Select Your Assignment File From Its Location To Upload



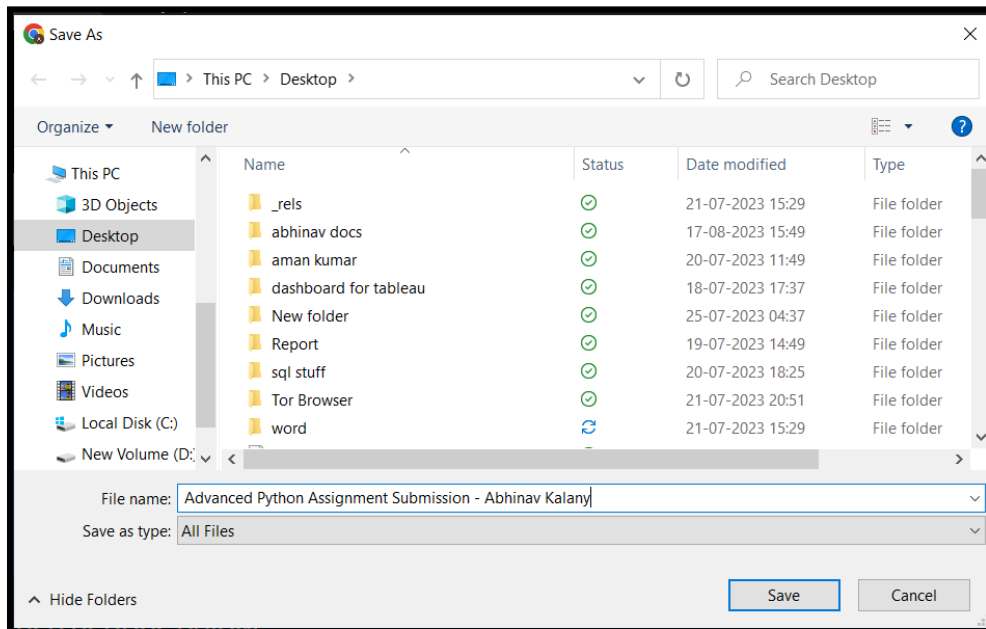**Step 4:** Once The Upload Is Done, Zip The file by clicking on "ZIP files"

**Step 5:**Once The ZIP File Is Compressed Click on Save ZIP File



**Step 6:** Name This Zip File While Saving Into Your Local folder
➔ **Name Format:**
   "(**Assignment name)Assignment Submission - (Your Name)**"



**Step 7:** Once Saved, Submit This ZIP FIle On Your
Skillacademy Assignment Submission Portal