

# SQL SELECT query Lab Practice Question (CSE 3108)

Time: 1.10 hour

Import the university\_students.sql file in phpmyadmin workspace and perform the following -

**1. Basic Retrieval**

⇒ Write a query to display all columns for all students in the database.

**2. Specific Columns**

⇒ Write a query to show only the first name, last name, and email of all students.

**3. Filtering with WHERE**

⇒ Write a query to find all students with a GPA of 3.5 or higher.

⇒ Write a query to find all active students majoring in "Computer Science".

**4. Sorting Results**

⇒ Write a query to display all students sorted by their GPA in descending order.

⇒ Write a query to show students enrolled in 2020 or later, sorted by last name alphabetically.

**5. Aggregate Functions**

⇒ Write a query to find the average GPA of all students.

⇒ Write a query to count how many students are majoring in "Biology".

**6. GROUP BY**

⇒ Write a query to show the average GPA for each major, ordered by average GPA from highest to lowest.

⇒ Write a query to count how many students are enrolled in each year.

**7. HAVING Clause**

⇒ Write a query to find majors that have an average GPA above 3.2.

⇒ Write a query to find enrollment years with more than 50 students.

**8. Combining Conditions**

⇒ Write a query to find inactive students with less than 120 credits earned who enrolled before 2020.

⇒ Write a query to find students with GPAs between 2.5 and 3.5 who are majoring in either "Mathematics" or "Physics".

**9. Pattern Matching**

⇒ Write a query to find students whose last name starts with "Sm" (e.g., Smith, Smiley).

⇒ Write a query to find students with email addresses from the "gmail.com" domain.

**10. Date Functions**

⇒ Write a query to find students who are expected to graduate in 2024 (graduation\_date in 2024).

⇒ Write a query to find students who enrolled more than 4 years ago.

Save all the queries in a txt file and upload the file using the following link –

<https://forms.gle/U89Vf1eNSKRHWFS8>