"Heaven's Light is Our Guide"

Rajshahi University of Engineering & Technology, Rajshahi



Department of Electrical & Computer Engineering

Lab Report

Course Code : ECE 2216

Course Title : Data base systems sessional

Experiment No. : 02

Submission Date: 1-10-24

Submitted To- Oishi Jyoti

Assistant Professor,

ECE, RUET

Submitted By-

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Experiment No.: 02

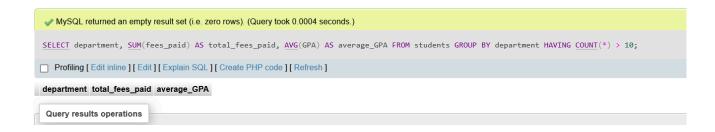
Name of the experiment: Learning and implementation of SELECT queries in database

Objectives:

- Create a students table with appropriate fields and data types.
- Insert data into the table to simulate real-world student records.
- Write SQL queries to retrieve specific information based on conditions like age, GPA, and department.
- Practice filtering, sorting, and grouping data using SQL.
- Calculate aggregate values such as total fees and average GPA.
- Gain practical experience in managing and analyzing database records.

Queries and Output:

1. Find students who are older than 20 and have a GPA above the average GPA of all students



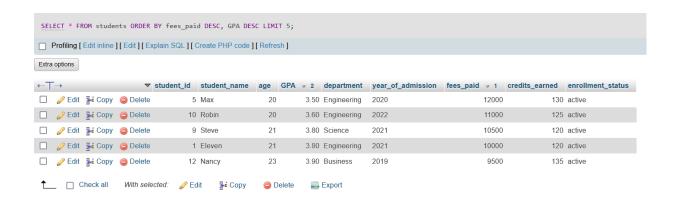
2. Find the top 5 students with the highest fees paid, ordered by GPA (in descending order) as a tiebreaker



3. List students who belong to the "Engineering" department, have a GPA greater than 3.5, and are enrolled after 2020



4. Find students who are not active (i.e., enrollment_status = 'inactive') and have not paid any fees (fees_paid = 0)



5. Calculate the total fees paid and average GPA for each department, but only for departments with more than 10 students

