"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

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Exp No.: 02

Exp Name: Using SQL language to do Select operation in phpmyadmin

objectives:

The objective of this experiment is to practice SQL skills by creating a students table, inserting data, and writing queries to retrieve specific information. It helps in understanding how to filter data, calculate averages, and analyze records based on conditions like GPA, fees, and enrollment status. This experiment builds confidence in using SQL for database management and data analysis..

Queries And Outputs:

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

Query:

SELECT *

FROM students

WHERE age > 20

AND GPA > (SELECT AVG(GPA) FROM students);

output:



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

Query:

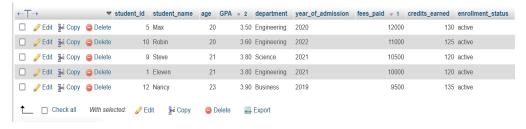
SELECT *

FROM students

WHERE age > 20

AND GPA > (SELECT AVG(GPA) FROM students);

output:



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

Query:

SELECT *

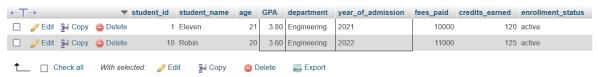
FROM students

WHERE department = 'Engineering'

AND GPA > 3.5

AND year_of_admission > 2020;

output:



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

Query:

SELECT*

FROM students

WHERE enrollment status = 'inactive'

AND fees paid = 0;

output:



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

Query:

SELECT department, SUM(fees_paid) AS total_fees_paid, AVG(GPA) AS average_GPA FROM students

GROUP BY department

HAVING COUNT(*) > 10;

output:

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]	
department total_fees_paid	average_GPA
Query results operations	