Havens Light is Our Guide

Rajshahi University of Engineering & Technology

Department of Electrical and Computer Engineering

Course code:ECE 2216

Course Title:Database Systems Sessional

Report no: 02

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Submitted to	Submitted by
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Experiment no:02

Experiment name:

Students Table

student_id	student_name	age	GPA	department	year_of_admission	fees_paid	credits_earned	enrollment_status
1	Eleven	21	3.8	Engineering	2021	10000	120	active
2	Dustin	22	3.9	Science	2020	9000	110	active
3	Will	19	3.4	Business	2022	8500	95	active
4	Mike	23	3.7	Science	2021	9500	115	inactive
5	Max	20	3.5	Engineering	2020	12000	130	active
6	Eddie	22	4.0	Arts	2019	8000	140	active
7	Billy	24	2.9	Engineering	2022	5000	60	active
8	Alexei	25	3.2	Business	2018	7500	100	inactive
9	Steve	21	3.8	Science	2021	10500	120	active
10	Robin	20	3.6	Engineering	2022	11000	125	active
11	Lucas	18	2.7	Engineering	2023	4000	50	active
12	Nancy	23	3.9	Business	2019	9500	135	active

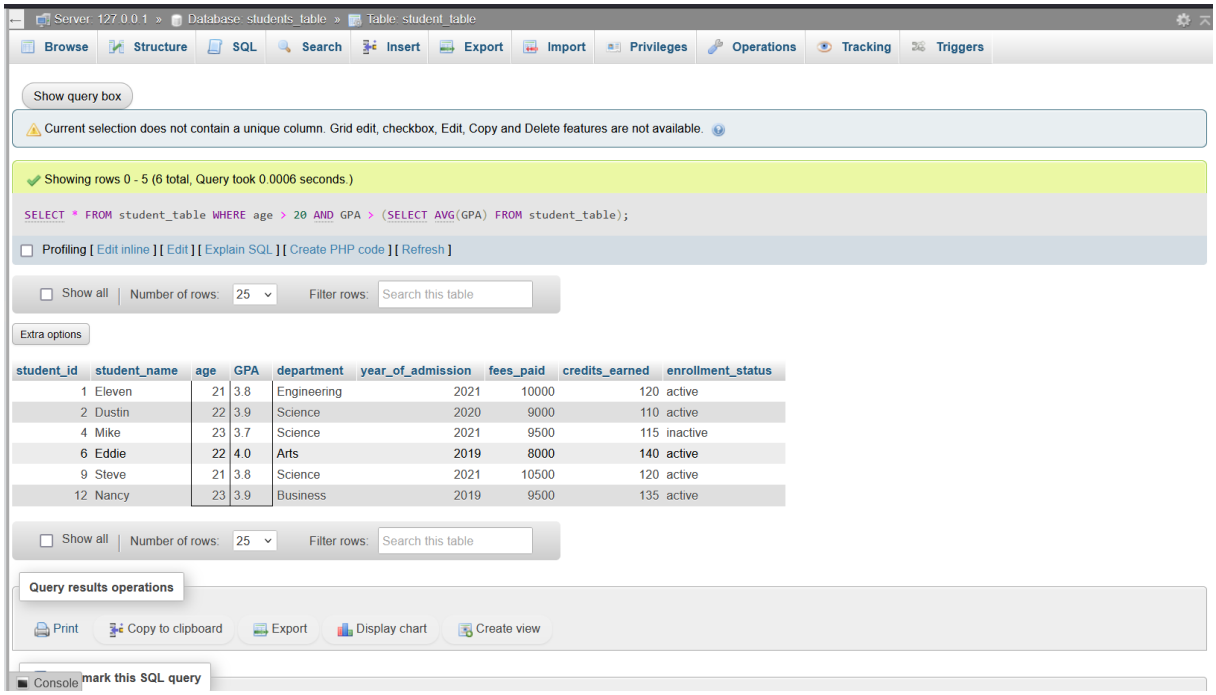
Task:

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

Objective: To learn different operations using database.

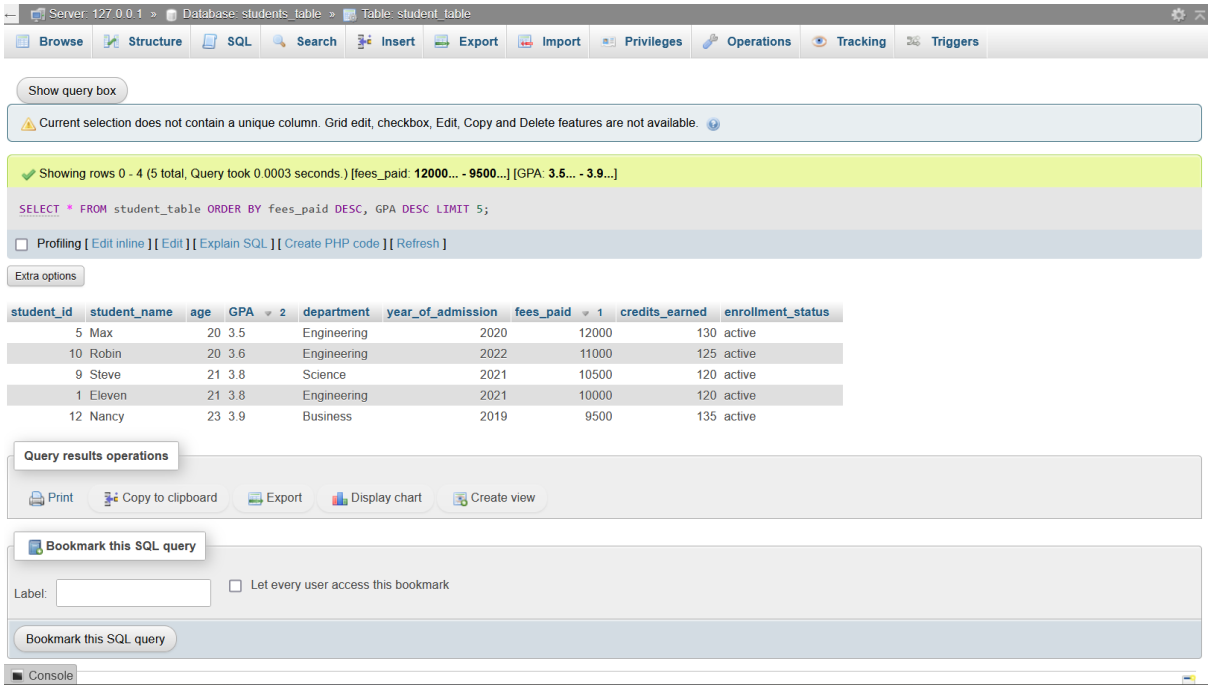
Query 01 : Finding students who are older than 20 and and have a GPA above the average GPA of all students.

Output:



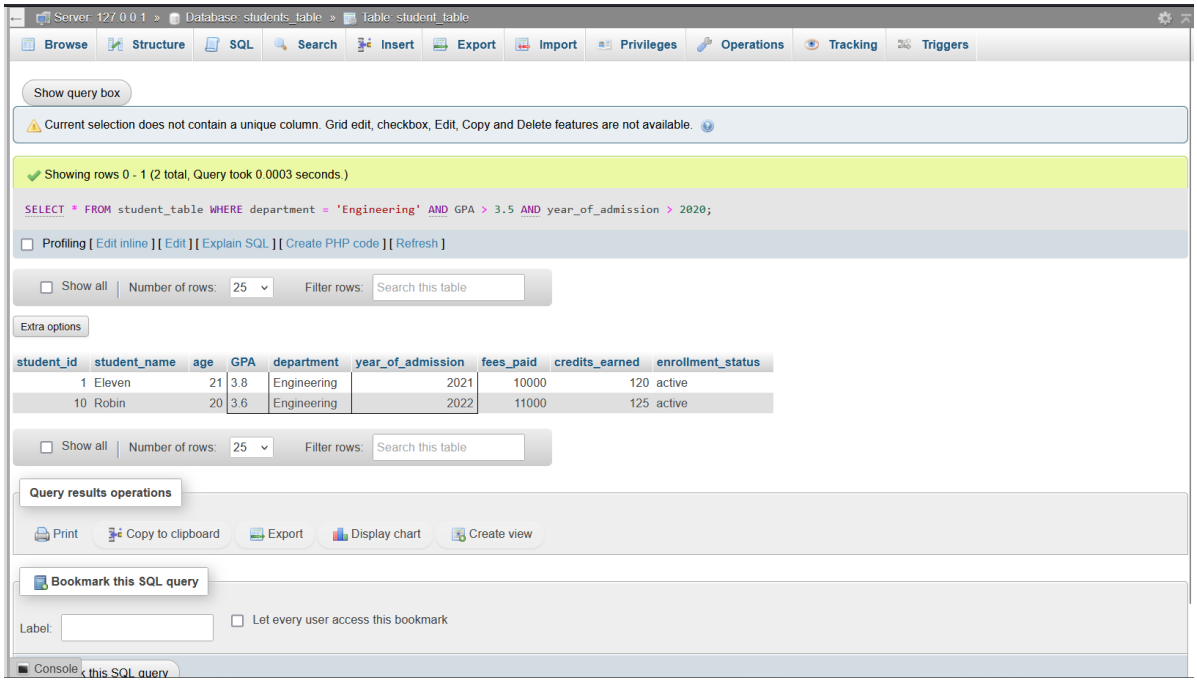
Query 02 : Finding top t students with the highest fees paid,ordered by GPA(in descending order) as a tiebreaker.

Output:



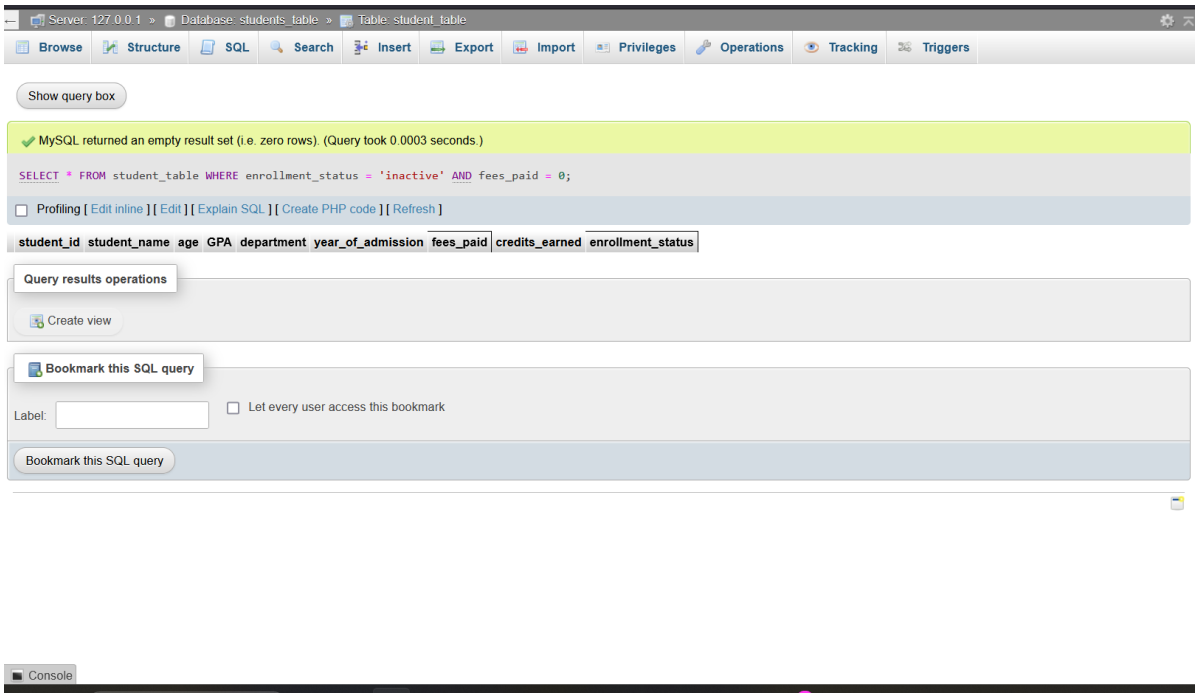
Query 03 : Listing students who belong to the “Engineering” department ,have a GPA greater than 3.5 and are enrolled after 2020.

Output:



Query 04 : Finding students who are not active (i.e.,enrolment_status=”inactive”) and have not paid any fees(fees_paid=0)

Output:



Query 05 : Calculating the total fees paid and average GPA for each department ,but only for departments with more than 10 students.

Output: