DBMS: LAB 7

JOINS AND AGGREGATE FUNCTIONS

University Fest Management System

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TASK 1:

CASE STUDY 1:

Question 1:

Yes, The querry runs successfully.

Question 2:

NO , The code doesn't run successfully.

The right approach would be to use an explicit Full Outer Join for the SRN column.

CASE STUDY 2:

Question 3:

For command:

ID	NAME	GRADE	
4	cde	s	
2	RAJU	s	
1	MADARA	a	
3	576	b	

Id	Name	Grade
1	MADARA	a
2	RAJU	s
3	Cde	S
4	567	d

SELECT * FROM Demo ORDER BY Name

So basically command 1 , Command sorts the rows by the Name column in descending order.

Command 2, This command sorts the rows by the Name column in ascending order .which is the default

Question 4:

The student's expectation is wrong because the Grade column is probably set as an ENUM type. This means the grades are stored as numbers based on the order in which they were defined, not by alphabetical order.

So , While sorting, it follows the internal number order, not the letter order. To fix this, the student would need to change how the sorting is done to make it alphabetical

CASE STUDY 3:

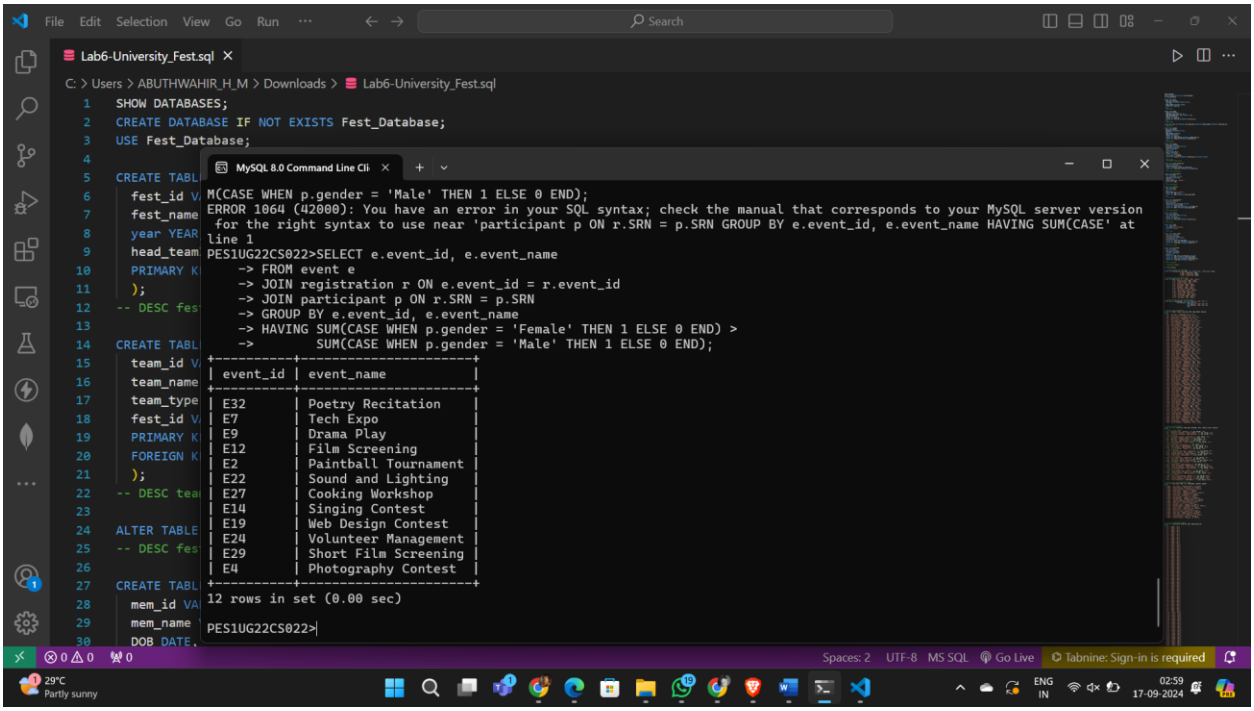
Student A's query counts based on the gender column, which is fine if the gender column doesn't have any missing values.

Student B's query counts all rows using count(*), which is accurate even if some rows have missing values in the gender column.

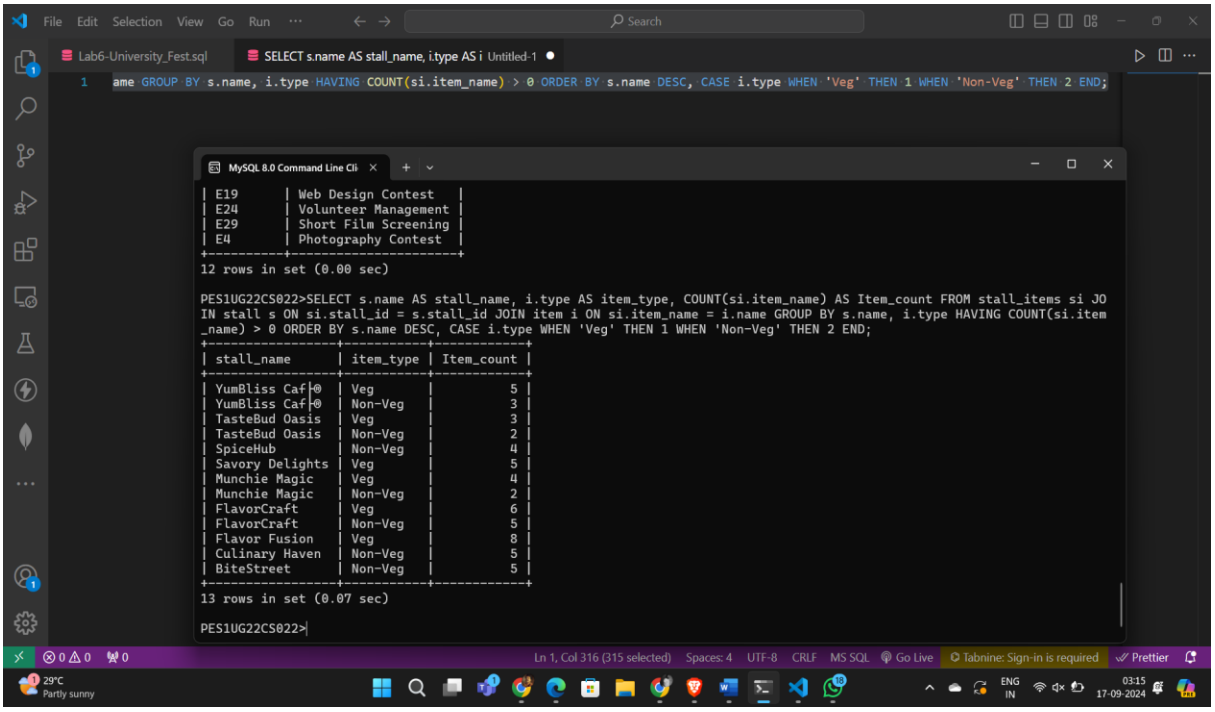
Both Student A and Student B wrote correct queries to find out how many students are in each section for each semester…

Task 2:

Question1:



Question 2:



Question 3 for students to solve:

```
PES1UG22CS022>SELECT p.name AS Participant,
    ->        GROUP_CONCAT(v.name ORDER BY v.name SEPARATOR ', ') AS Visitor_list,
    ->        IF(COUNT(v.name) > 0, COUNT(v.name), 0) AS Visitor_count
    -> FROM participant p
    -> LEFT JOIN visitor v ON p.SRN = v.SRN
    -> GROUP BY p.name
    -> ORDER BY Visitor_count DESC;
+------------------+---------------------------------------+---------------+
| Participant      | Visitor_list                          | Visitor_count |
+------------------+---------------------------------------+---------------+
| John Smith       | David Wilson, John Doe, Michael Johnson |             3 |
| Charlotte Baker  | Isabella Martinez, Olivia Anderson    |             2 |
| Mia Davis        | Emily Davis, Sophia Brown             |             2 |
| Michael Williams | Andrew Thomas, Daniel Taylor          |             2 |
| Emily Johnson    | Jane Smith                            |             1 |
| Amelia Turner    | NULL                                  |             0 |
| Andrew Martinez  | NULL                                  |             0 |
| Ava Wilson       | NULL                                  |             0 |
| Benjamin Clark   | NULL                                  |             0 |
| Christopher Moore | NULL                                  |             0 |
| Daniel Lopez     | NULL                                  |             0 |
| David Lee        | NULL                                  |             0 |
| Emma Anderson    | NULL                                  |             0 |
| Ethan Miller     | NULL                                  |             0 |
| Henry Hill       | NULL                                  |             0 |
| Isabella Thompson | NULL                                  |             0 |
| Jacob Jones      | NULL                                  |             0 |
| James Harris     | NULL                                  |             0 |
| Liam Martinez    | NULL                                  |             0 |
| Olivia Davis     | NULL                                  |             0 |
| Scarlett Evans   | NULL                                  |             0 |
| Sofia Green      | NULL                                  |             0 |
| Sophia Brown     | NULL                                  |             0 |
| Victoria Young   | NULL                                  |             0 |
| William Taylor   | NULL                                  |             0 |
+------------------+---------------------------------------+---------------+
25 rows in set (0.00 sec)

PES1UG22CS022>
```