SQL LAB – 5

OPERATORS, ORDER BY AND GROUP BY CLAUSE

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QUESTIONS

1. Let's consider a scenario where you want to retrieve information about students from a database table named student and display the results in ascending order based on their last names.
   Hint: Use orderby clause in an ascending Order
2. Let's consider a scenario where you want to count the number of students based on their gender from a database table named Student.
   Hint: use GroupBy clause and Count() function

ChatGPT Exercise

Using ChatGPT generates SQL queries of the below problem.

Scenario :

Library Books Given a table called books with columns book_id, title, and author_id, write a query to count the number of books written by each author, ordering the results by the author's name without using a join clause.

1. Let's consider a scenario where you want to retrieve information about students from a database table named student and display the results in ascending order based on their last names.
   Hint: Use orderby clause in an ascending Order

   Code ;

```
-- Used order by clause to display details in ascending order based on last name.
SELECT * FROM student
ORDER BY lastname ASC;
```

Output:

StudentID	FirstName	LastName	DateOfBirth	Gender	Email	Phone
4	David	Brown	1997-02-05	Male	david.brown@gmail.com	4567890123
5	Eva	Davis	1999-05-09	Female	eva.davis@yahoo.com	5678901234
1	Alice	Johnson	1995-03-18	Female	alice.johnson@gmail.com	1234567890
3	Carol	Taylor	2000-11-11	Female	carol.taylor@yahoo.com	3456789012
7	Roger	White	2000-08-21	Male	rogerwhite@example.com	9876543210

2. Let's consider a scenario where you want to count the number of students based on their gender from a database table named Student. Hint: use GroupBy clause and Count() function.

Code:

```
--  Used group by clause to group by gender and used count function to count the number of students
SELECT Gender, COUNT(*) as Count_of_gender FROM student
GROUP BY gender;
```

Output:

Gender	Count_of_gender
Female	3
Male	2

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sql Copy code

```sql
SELECT author_id, author_name, COUNT(*) AS book_count
FROM books
GROUP BY author_id, author_name
ORDER BY author_name;
```