

Welcome to **INTERNSHIP STUDIO**

Module 03 | Lesson 04

Analyzing Data with SQL

Sorting & Filtering Data

Introduction to Sorting and Filtering Data

- Sorting and filtering are important techniques in SQL for organizing and extracting relevant data from a database.
- Sorting arranges data in a specified order, and filtering selects specific rows based on certain conditions.

Sorting Data

- Sorting data allows you to arrange the result set in a desired order.
- The ORDER BY clause is used to sort data in SQL.
- Syntax:

sql

```
SELECT column1, column2, ...  
FROM table_name  
ORDER BY column1 [ASC|DESC], column2 [ASC|DESC], ...;
```

Sorting Data- Example

- Example: Sort the data by GPA in descending order.
- Syntax:

sql

```
SELECT *  
FROM table_name  
ORDER BY GPA DESC;
```

Filtering Data

- Filtering data allows you to select specific rows based on certain conditions.
- The WHERE clause is used to filter data in SQL.
- Syntax:

sql

```
SELECT column1, column2, ...  
FROM table_name  
WHERE condition;
```

Filtering Data- Example

- Example: Filter the data to show only students with a GPA above 3.5.
- Syntax:

sql

```
SELECT *  
FROM table_name  
WHERE GPA > 3.5;
```

Combining Sorting and Filtering

- Sorting and filtering can be combined to retrieve specific data in a desired order.
- Syntax:

sql

```
SELECT column1, column2, ...  
FROM table_name  
WHERE condition  
ORDER BY column1 [ASC|DESC], column2 [ASC|DESC], ...;
```

Combining Sorting and Filtering-Example

- Example: Retrieve students with a GPA above 3.5, sorted by GPA in descending order.
- Syntax:

sql

```
SELECT *  
FROM table_name  
WHERE GPA > 3.5  
ORDER BY GPA DESC;
```


SUMMARY

You got

this

- Sorting and filtering data are essential techniques in SQL for organizing and extracting specific information from a database.
- The ORDER BY clause is used for sorting data, while the WHERE clause is used for filtering data based on conditions.
- Understanding how to sort and filter data allows for effective data analysis and retrieval in SQL.

Next

session

Demonstration on Workbench