

Welcome to **INTERNSHIP STUDIO**

Module 03 | Lesson 09

Advanced SQL

Data Manipulation

Introduction to Data Manipulation

- Data manipulation is an important aspect of SQL that involves modifying data in tables.
- SQL provides various statements to insert, update, and delete data in tables, allowing for efficient data management.

Inserting Data

- The INSERT statement is used to add new rows of data into a table.
- Syntax:

```
INSERT INTO table_name (column1, column2, ...)  
VALUES (value1, value2, ...);
```

Inserting Data- Example

- Example: Insert a new student with ID 1001, Major "Computer Science," and GPA 3.8 into the table.
- Syntax:

```
INSERT INTO table_name (ID, Major, GPA)  
VALUES (1001, 'Computer Science', 3.8);
```

Updating Data

- The UPDATE statement is used to modify existing data in a table.
- Syntax:

```
UPDATE table_name  
SET column1 = value1, column2 = value2, ...  
WHERE condition;
```

Updating Data- Example

- Example: Update the GPA of the student with ID 1002 to 3.6.
- Syntax:

```
UPDATE table_name  
SET GPA = 3.6  
WHERE ID = 1002;
```

Deleting Data

- The DELETE statement is used to remove rows of data from a table.
- Syntax:

```
DELETE FROM table_name  
WHERE condition;
```

Deleting Data- Example

- Example: Delete the student with ID 1003 from the table.
- Syntax:

```
DELETE FROM table_name  
WHERE ID = 1003;
```


SUMMARY

You got

this

- Data manipulation using SQL allows for efficient management of data in tables.
- INSERT, UPDATE, and DELETE statements enable adding, modifying, and removing data as needed.
- Understanding how to manipulate data using SQL empowers effective data management and maintenance.

Next

session

Demonstration on Workbench