SQL WHERE Clause

Overview

The **SQL WHERE Clause** is used to filter records in a database query. It allows users to specify conditions that must be met for records to be selected. This clause is commonly used in **SELECT**, **UPDATE**, **DELETE**, and other SQL statements.

Syntax

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

Example Usage

Selecting Specific Records

The following query selects all customers from Mexico:

```
SELECT * FROM Customers
WHERE Country = 'Mexico';
```

Using WHERE in Different SQL Statements

- **UPDATE Statement:**

```
UPDATE Customers
SET ContactName = 'Juan Perez'
WHERE Country = 'Mexico';
```

- **DELETE Statement:**

```
DELETE FROM Customers
WHERE Country = 'Mexico';
```

Text Fields vs. Numeric Fields

- **Text Fields:** SQL requires **single quotes** (' ') around text values.

```sql
SELECT * FROM Customers
WHERE Country = 'Mexico';
```

- **Numeric Fields:** Numbers should **not** be enclosed in quotes.

```sql
SELECT * FROM Customers
WHERE CustomerID = 1;
```

Operators in the WHERE Clause

You can use various operators to refine your search conditions.

Operator	Description
=	Equal to
>	Greater than
<	Less than
>=	Greater than or equal to
<=	Less than or equal to
<>	Not equal to
BETWEEN	Between a range
LIKE	Search for a pattern
IN	Specify multiple possible values

Example: Using Comparison Operators

To select all customers with a **CustomerID greater than 80**:

```sql
SELECT * FROM Customers
WHERE CustomerID > 80;
```

Conclusion

The SQL WHERE clause is essential for filtering data in queries. By using different operators and conditions, users can retrieve only the necessary records, making database operations more efficient.