DML (Continue)

Now, let’s continue with the remaining DML statements (update and delete commands).

First, let’s create our table and insert some data inside it.

```
CREATE TABLE Employees (
EmployeeID INT PRIMARY KEY,
FirstName VARCHAR(50),
LastName VARCHAR(50),
Salary DECIMAL(10, 2) DEFAULT 30000
);
INSERT INTO Employees (EmployeeID, FirstName, LastName,salary)
VALUES (1, 'John', 'Doe',50000),
(2, 'Jane', 'Smith',35000),
(3, 'Tom', 'Adam',43000),
(4, 'Ibram', 'killer',32000),
(5, 'George', 'Antonio',22000);
```

2.Update statement:

The UPDATE statement in SQL Server allows you to modify existing records in a table.

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

- **`table_name`**: The name of the table where you want to update data.
- **`SET`**: Specifies the columns to update and their new values.
- **`WHERE`**: Filters which records should be updated. Without `WHERE`, all rows in the table will be updated!

Now, let's update on our table employee data.

```
UPDATE Employees
SET Salary = 75000
WHERE EmployeeID = 4;
```

3. DELETE Statement:

The DELETE statement is used to remove one or more rows from a table.

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

- **`table_name`**: The name of the table from which you want to delete data.
- **`WHERE`**: Specifies which records to delete. If you omit the `WHERE` clause, all rows in the table will be deleted.

Now,Let’s say you want to delete the employee whose EmployeeID is 5.

```
DELETE FROM Employees
WHERE EmployeeID = 5;
```

You can delete rows based on multiple conditions.

```
DELETE FROM Employees
WHERE Salary < 30000 AND LastName = 'Smith';
```

Note: you can use AND for combining multiple conditions at the same time for the row or use OR for applying delete/update for the rows with any of the mentioned conditions.

BE CAREFUL! A DELETE statement without a WHERE clause will delete **all rows** in the table!

```
DELETE FROM Employees;
```

This will delete all records in the Employees table.

Output clause (optional):

SQL Server has an optional OUTPUT clause that lets you return the old and new values when updating or deleting records.

Update example:

```
UPDATE Employees
SET Salary = 85000
OUTPUT DELETED.Salary AS OldSalary, INSERTED.Salary AS NewSalary
WHERE EmployeeID = 2;
```

- `DELETED.Salary`: Returns the old salary before the update.
- `INSERTED.Salary`: Returns the new salary after the update.

Delete example:

```
DELETE FROM Employees
OUTPUT DELETED.EmployeeID, DELETED.FirstName, DELETED.LastName
WHERE EmployeeID = 1;
```

This will return the `EmployeeID`, `FirstName`, and `LastName` of the deleted record.

Assignment lab

1. Import the following dataset to your database.

https://www.mediafire.com/file/4atoldrzbzv6vpo/TSQLV6.sql/file

2. In the HR.Employees table , update the postal code of the employee no. 8 to be 10010 , and show in the results his old postal code and his new postal code.

3. In the stats.scores table , delete all the scores which has testid of ABC and scores of less than 60.