Data Definition Language, Inner Joins, and Aggregate Functions

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**(DDL) insert, update, delete**

A subset of SQL's data definition language (DDL). This is the language used to describe the data in the database and the connections between them. The script creates the DDL for the database objects to create templates for new objects that can be created based on existing ones, keeps a snapshot of the database structure, and creates a test system where the database behaves exactly like the production system. can be set up. data. For example, create the DDL for the Customer table and modify it to create a Customer New table with the same schema.

The usual structure is an INSERT INTO SQL insert statement, followed by the name of the table, a list of columns, and the values ​​to add to those columns in the SQL insert statement. Pasting is usually a simple process. It starts with simple instructions for inserting lines. However, it is often more efficient to use the set-based method to create new rows.

Example: INSERT INTO table\_name

VALUES (value1, value2, value3, ...);

One of the three main statements on the DML side of the T-SQL language that deals with updating data is the UPDATE statement. We covered some basics of the statement and showed how to perform updates based on links. This is a very common and straight forward.

Example: UPDATE table\_name

SET column1 = value1, column2 = value2, ...

WHERE condition;

To delete rows from a table, use the delete keyword in data manipulation language or DML statements. Of all DML statements, the SQL delete action is the simplest. You don't have to worry about retrieving data from the table after running the delete command. Also, you don't have to worry about manipulating the data you've done. The database is simply told to delete a particular record and either it does or it doesn't. It's as easy as that.

Example: DELETE FROM table\_name WHERE condition;

**inner join, sum, and order by**

By joining matching rows of data from two or more tables, SQL Server's inner join clause can create new tables that do not physically exist. This join is common to both databases and is used to retrieve data based on logical relationships (or shared fields) between tables. Suppose you want to join two tables, table A and table B, using a SQL inner join. The result of this join is a new result set containing matching rows from these two tables.

Example: Select \* FROM tableA

INNER JOIN tableB ON common column in tableA = common column in tableB

SQL has many cool features and aggregate functions are definitely one of these features, actually functions. While they are not specific to SQL, they are used often. They are part of the SELECT statement, and this allows us to have all benefits of SELECT (joining tables, filtering only rows and columns we need), combined with the power of these functions.

SELECT SUM(column\_name)

FROM table\_name

WHERE condition;

Aggregate functions are unquestionably one of the many interesting features—well, functions—of SQL. Although they are not unique to SQL, they are frequently used. They are a component of the SELECT statement, which combines the strength of these functions with the advantages of SELECT (joining tables, filtering only the rows and columns we need).

Example: SELECT column1, column2, ...

FROM table\_name

ORDER BY column1, column2, ... ASC|DESC;

**Graphical user interface

Description automatically generated with medium confidenceDatabase Entity Relationship Diagram**

**Database Tables**

**Graphical user interface, application

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**SQL Insert Queries**

**Text

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**Graphical user interface, application

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