

# T-SQL Data Manipulation Playbook

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# Final Takeaway



## Different T-SQL sub-languages

- DQL
- DDL
- DCL

## DML: Data Manipulation Language

- INSERT, UPDATE, and DELETE

## Quick refresher

- SELECT
- WHERE



# Final Takeaway



**SELECT is potentially the most common statement used in a database**

- But to query data, you need data

**Add data to your tables using INSERT**

- All columns and all values, values, NULL and default values, explicitly set identity, constraints, and BULK INSERT



# Final Takeaway



Modify data using UPDATE

UPDATE data in

- One row
- Multiple rows

**@@ROWCOUNT** and **OUTPUT**

Use variables to perform operations

**FROM** to use other tables and views

# Final Takeaway



## Remove records using DELETE

- Be careful!

## DELETE

- One record
- Or multiple records
- Based on condition in another table

## Remove data with constraints

- Cascade DELETE

## TRUNCATE

# Final Takeaway



## Transaction

- Important to maintain data integrity
- Speed

## ACID

Autocommit, explicit, and implicit

**BEGIN, COMMIT, ROLLBACK, and SAVE**

Distributed transactions

# Final Takeaway



INSERT providing multiple values

Populate one table based on a query

Retrieve specific fields for INSERT

OUTPUT

MERGE

BULK INSERT with a format file

