

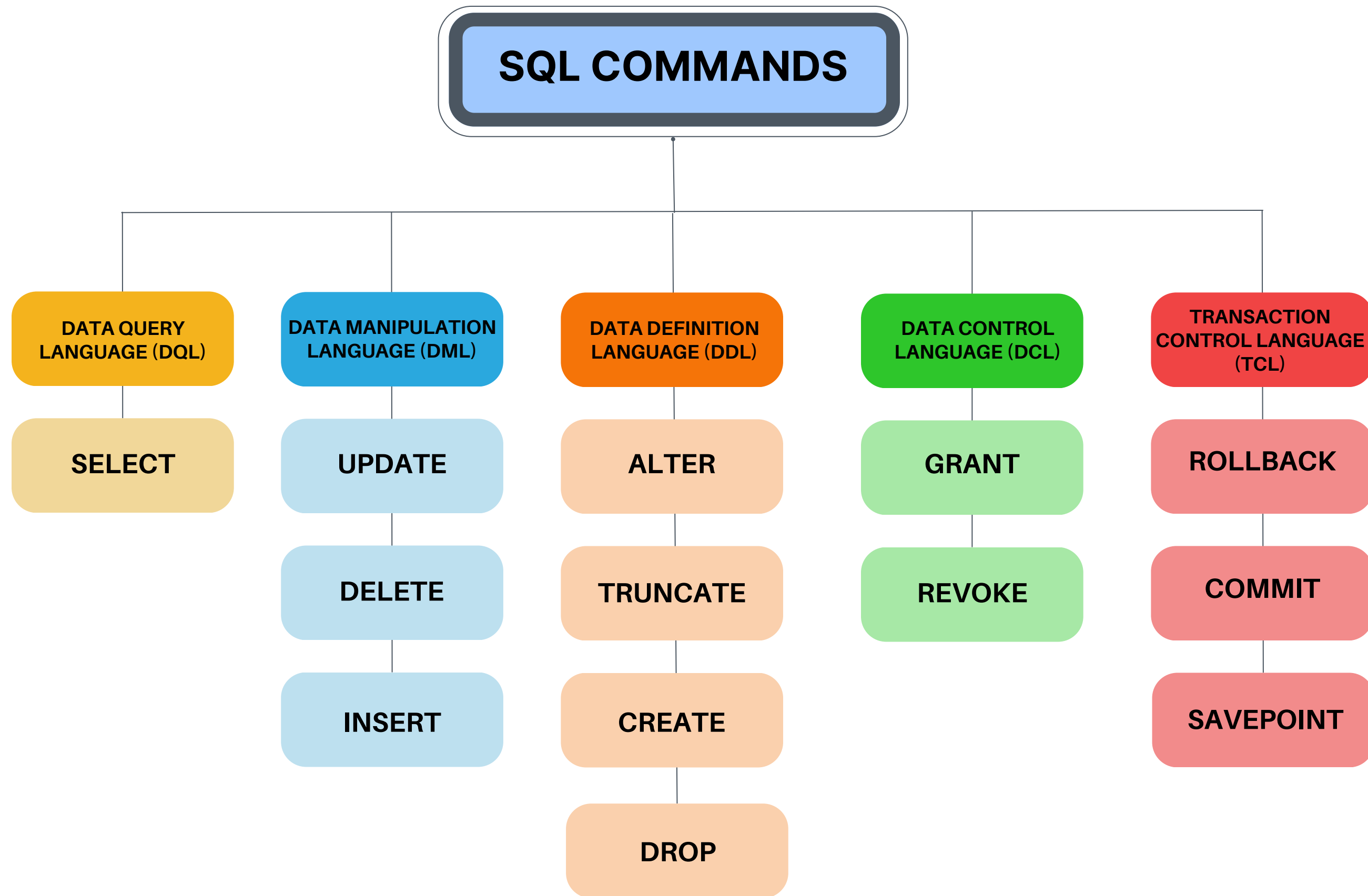


SQL: 5 Basic Commands

SQL (Structured Query Language) commands are fundamental instructions used for managing and manipulating relational databases.

These commands are broadly classified into 5 categories:

- Data Query Language (DQL)
- Data Manipulation Language (DML)
- Data Definition Language (DDL)
- Data Control Language (DCL)
- Transaction Control Language (TCL)



Data Query Language (DQL)

1 SELECT

Retrieves data from a database based on specific criteria.
This is the fundamental command for querying data, allowing you to extract the information you need.



Data Manipulation Language (DML)

1

UPDATE

Modifies existing data within a table. It allows changing the values of specific columns based on certain conditions.

2

DELETE

Removes rows from a table based on specific conditions. This operation permanently deletes data.

3

INSERT

Adds new rows of data into a table. It requires specifying the values for each column in the new row.



Data Definition Language (DDL)

1 ALTER

Modifies existing database objects by adding, deleting, or modifying columns, constraints, or indexes.

2 TRUNCATE

Removes all rows from a table without logging individual row deletions, making it faster but irreversible.

3 CREATE

Creates new database objects such as tables, indexes, views, and stored procedures.

4 DROP

Deletes the table and its structure from the database.



Data Control Language (DCL)

1

GRANT

Controls access to data in a database to users, allowing them to access and modify data.

2

REVOKE

Removes previously granted access from users or roles, limiting their access to data.

Transaction Control Language (TCL)

1

COMMIT

Saves all changes made within a transaction permanently to the database. This makes the changes visible to other users.

2

ROLLBACK

Reverts the database to the state it was in before the transaction began, undoing all changes made since the last commit.

3

SAVEPOINT

Sets a point within a transaction where you can roll back to. This allows for partial rollbacks, reverting changes to a specific point.

Thank You