SQL Interview
Questions
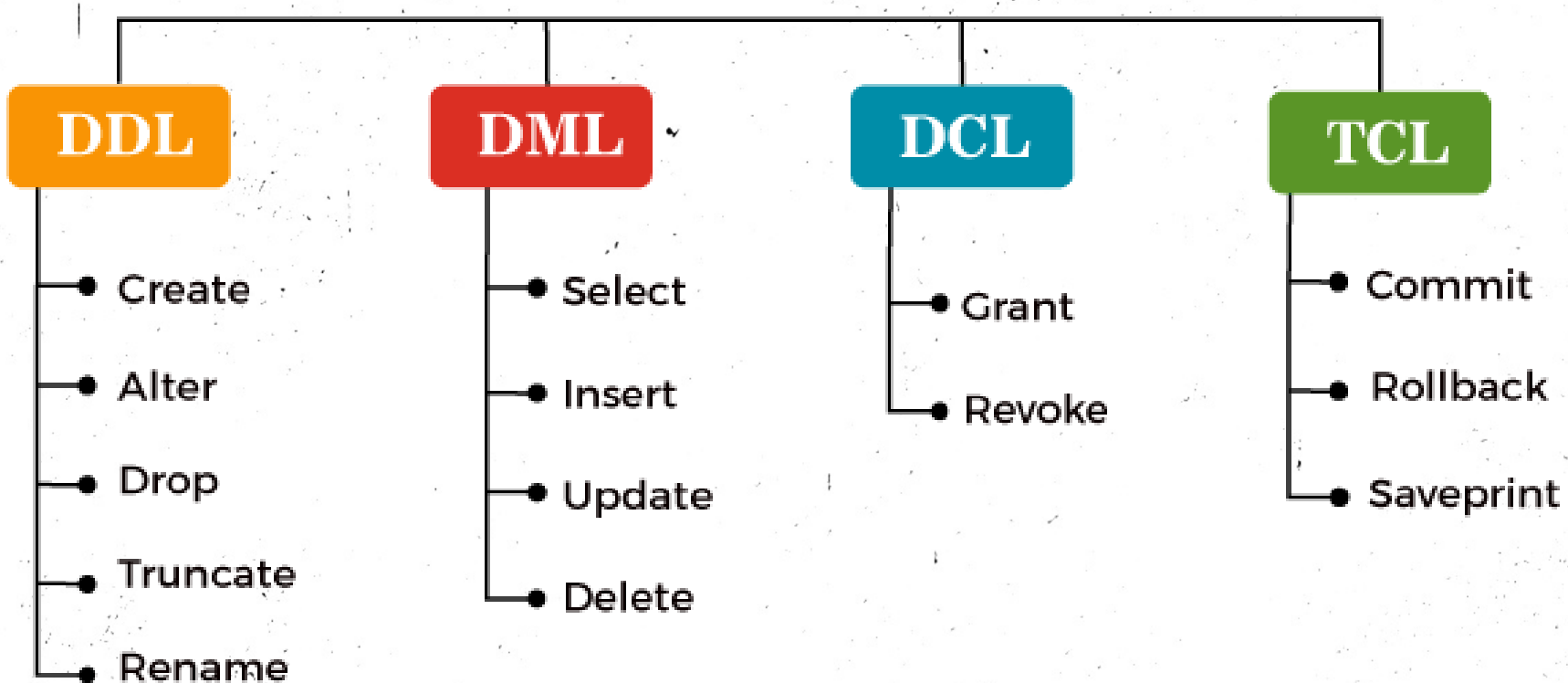
Q.1) What are the different types of SQL commands?

SQL commands can be categorized into four main types:

Types of SQL Commands

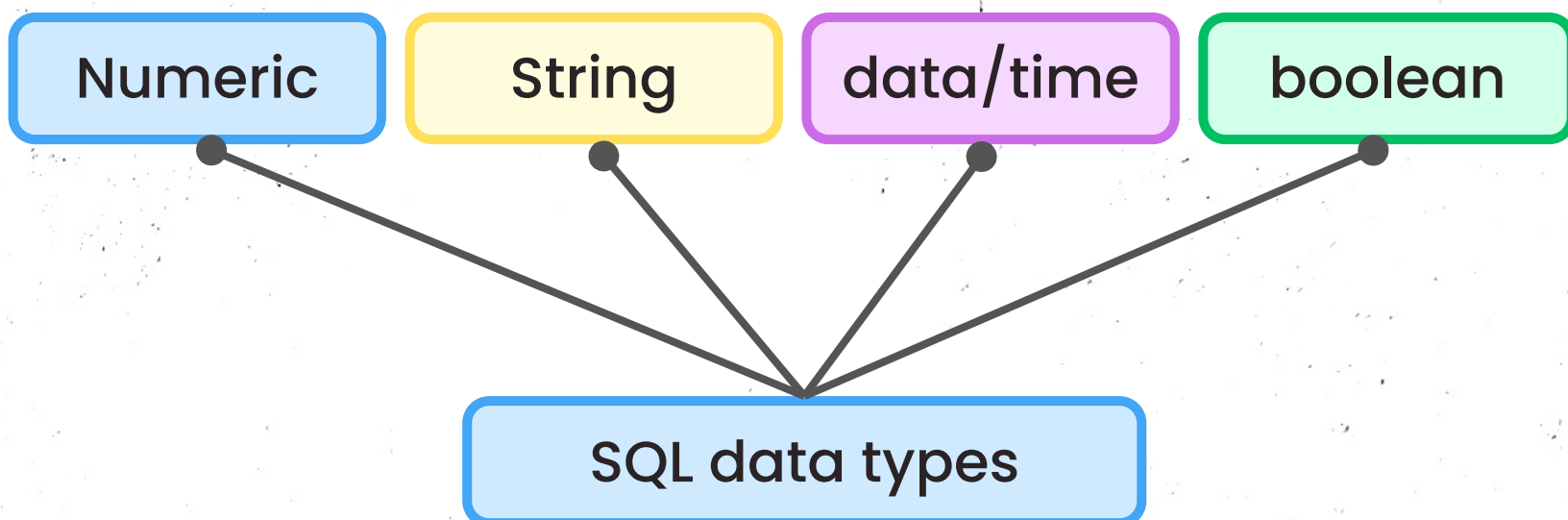| DDL	DML	DCL	TCL
• Create	• Select	• Grant	• Commit
• Alter	• Insert	• Revoke	• Rollback
• Drop	• Update		• Saveprint
• Truncate	• Delete		
• Rename			

Q.2) What is the purpose of the SQL SELECT statement?

The select statement used to retrieve data from one or more tables

Q.3) What are the primary SQL data types

SQL data types include numeric, string, date/time, and boolean. Each type is used to store different kinds of data

Numeric	String	data/time	boolean

SQL data types

Q.4) What are the different types of joins in SQL?

The different types of SQL joins are:

INNER JOIN: Returns matching rows from both tables

LEFT JOIN: Returns all rows from the left table and matching rows from the right

RIGHT JOIN: Returns all rows from the right rows from the left table and matching rows

FULL OUTER JOIN: Returns all rows from both tables

CROSS JOIN: Returns all possible combinations of rows from both tables

SELF JOIN: Joins a table with itself, often for hierarchical

Q.5) What is difference between a subquery and a join?

Subquery: Nested query used within another query, often in WHERE or HAVING clauses.

Join: Combines rows from two or more tables based on a specified condition, typically in the FROM clause.

Q.6) Explain the ACID properties in the context of database transactions

ACID stands for Atomicity, Consistency, Isolation and Durability. These properties ensure that database transpose reliable and mana data integrity
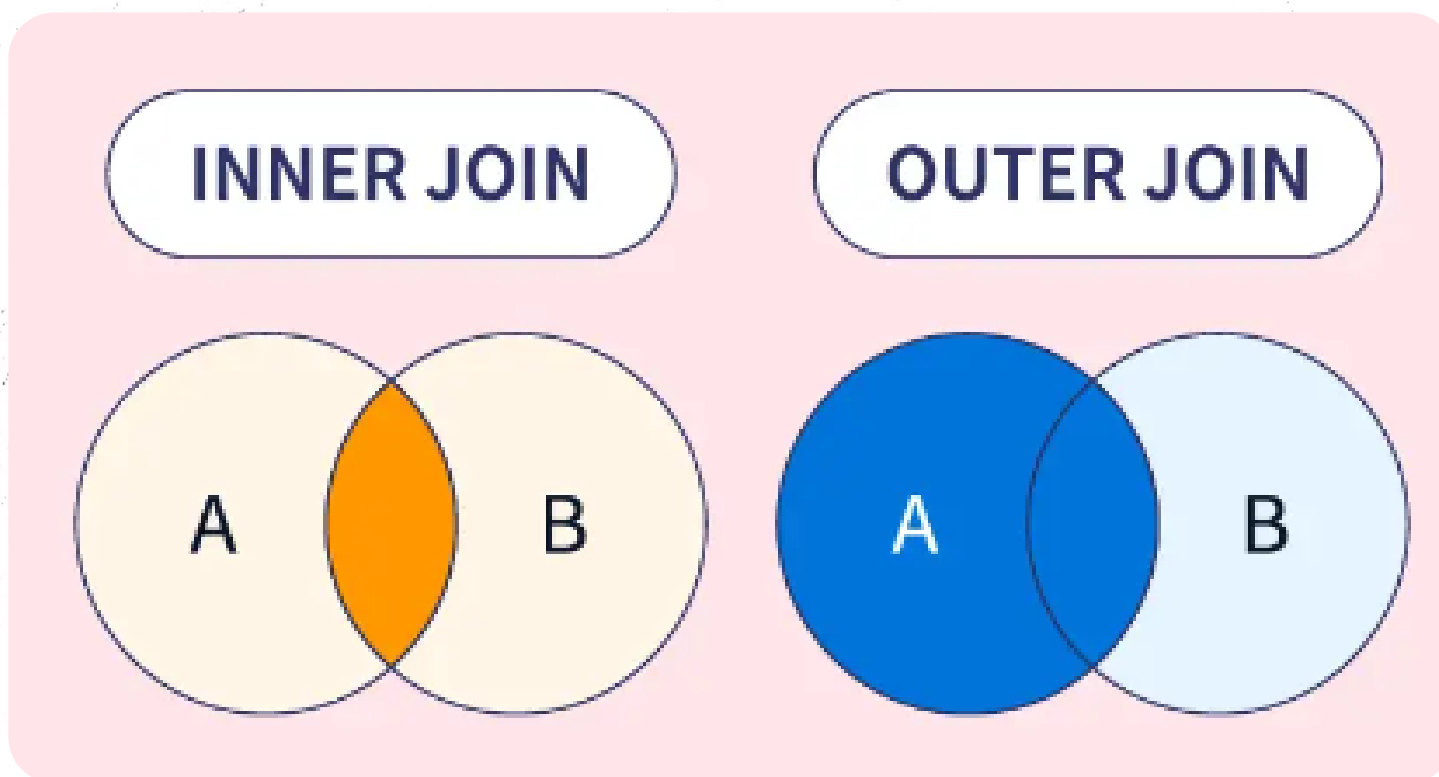
Q.7) Explain the difference between INNER JOIN and OUTER JOIN

INNER JOIN returns only the rows that have matching values in both tables,

while OUTER JOIN returns all rows from both tables and fills in missing values with NULL

Q.8) What is difference between GROUP BY and HAVING clauses in SQL?

GROUP BY is used to group rows that have the same values into summary rows, while HAVING is used to filter grouped rows based on a specified condition.

Q.9) What is the difference between UNION and UNION ALL in SQL?

UNION: Removes duplicate rows from the result.

UNION ALL: Includes all rows, including duplicates, in the result.