⇒ Where clause vs having clause

- 1. Where Clause filter before aggregation
 - Having Clause filter after aggregation
- 2. Where Clause used for filtering individual rows
 - Having Clause used for filtering grouped data
- 3. Where Clause works on column values
 - Having Clause works on aggregate functions (sum(),avg())
- 4. Where Clause used with select, from, join
 - Having Clause used with group by

○ Order of execution of statement in sql

- 1. FROM Choose the table(s)
- 2. JOIN Merge tables if needed
- 3. WHERE Filter rows before aggregation
- 4. GROUP BY Group rows
- 5. HAVING Filter grouped data
- 6. SELECT Pick and compute columns
- 7. DISTINCT Remove duplicates
- 8. ORDER BY Sort the result
- 9. LIMIT / OFFSET Get specific number of rows

⇒ what is keys and type of keys

Keys are the unique tags which help us to organize and connect data in a database. They ensure that each piece of information is stored correctly and can be retrieved efficiently.

Types of keys:

- 1. Primary Key -> A unique identifier for each row in a table and prevents duplicate records and helps us to find quickly.
- 2. Foreign Key -> A link between two tables and maintain relationships between tables and ensured data consistency.
- 3. Candidate Key -> A column or combination of column that could be a primary key but only one is chosen.
- 4. Unique Key -> Ensure that all values in a column are unique and can contain null value.
- 5. Composite Key -> A combination of two or more columns used together to create a unique identifier.
- 6. Super Key -> Any key that can uniquely identify a row.