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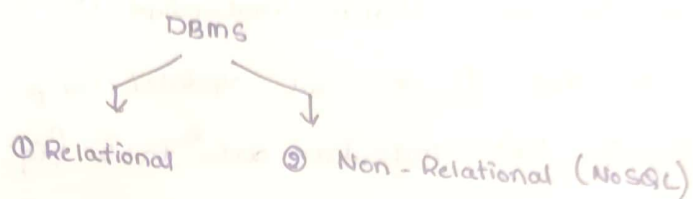
SQL

→ Structured Query Language

Data Base :

collection of data stored in a format that can be easily accessed.

→ To manage our data bases, we use a software application called Data Base Management System (DBMS).



① Relational Data Base Management Systems :

We store data in tables that are linked to each other using relationships.

Each table stores data about a specific type of object like customers, orders, products.

→ We use SQL to query & modify our data.

Most popular RDBMS :

1, MySQL

2, SQL Server (by MS)

3, Microsoft Oracle

→ MySQL

It is the most popular open source data base in the world.

② Non-Relational DBMS (NoSQL)

→ These systems don't understand SQL. They have their own query language.

# SQL with MySQL

## \* Creating the Data Bases

In every data base we have tables (we store data) and we have views (virtual cables) so that we can combine different tables, and put them in a view.

→ There will be an internal relationships (no of) between the tables, so that if we want update/change data, we have to go that particular data table (eg: customers, orders)

The Select Statement [How to retrieve data from a single panel]

→ For 1<sup>st</sup> step to write query, (to get data ← database)

1. Select a data base. [Query written will be executed against that data base]

1, USE sql\_store; → database

To retrieve data from this data base.

2, SELECT customer\_id, first\_name

columns we want to retrieve  
or we can use \* to retrieve all columns.

3, FROM customers

→ table we want to query.

4, WHERE customer\_id = 1



to retrieve data of only a specific customer

Use "--" → 2 hyphens to make a comment.

5, ORDER BY first\_name



sorted in order by first name.

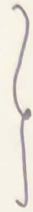
Select Clause

SELECT

FROM

WHERE

ORDER BY



Order is important

otherwise it will be a syntax error

→ Line breaks are not necessary.

→ follows basic arithmetic rules (BODMAS)

→ We can use "AS" to give name.

Eg:  $(points + 10) * 100$  AS discount\_factor.



alias.



Use ' ' (or) " "

to get space in middle.

→ SELECT DISTINCT state

FROM customers

for unique list with no duplicates.