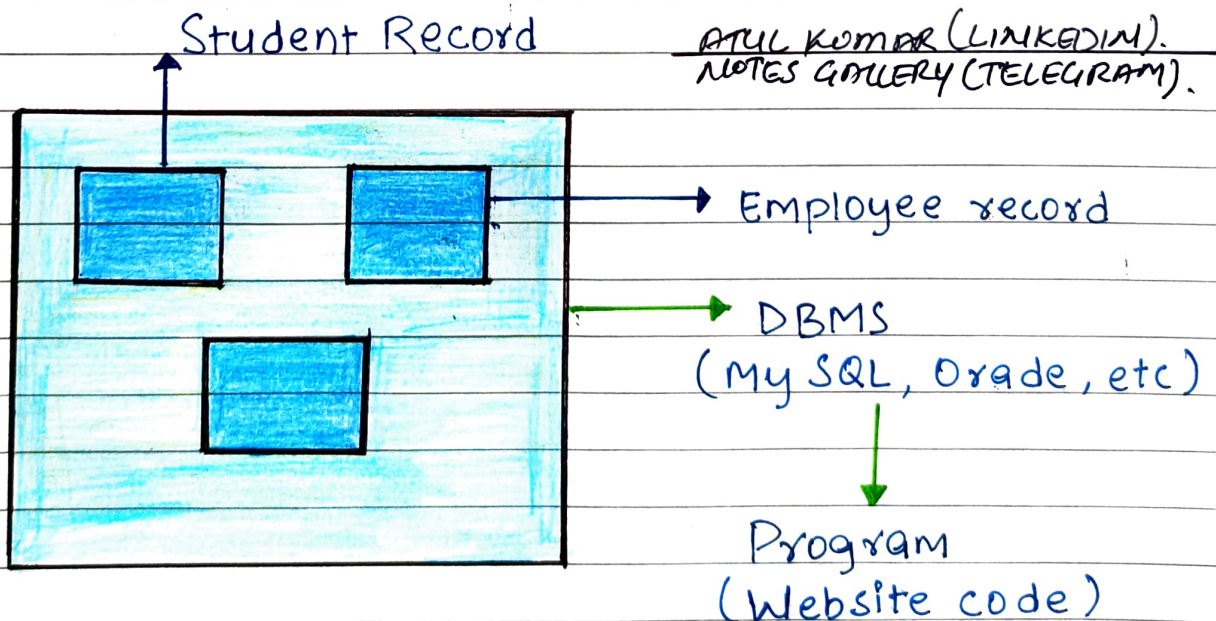


DBMS Interview Q/A

● What is DBMS and what is its utility? explain RDBMS with examples.

✓ DBMS stands for Data Base Management System, is a set of applications or programmes that enable users to create and maintain a database. DBMS provides a tool or an interface for performing various operations such as inserting, deleting, updating, etc., into a database. It is a software that enables the storage of data more compactly and securely as comparative a file-based system.

Example of popular DBMS system are file system, XML, windows registry, etc.,



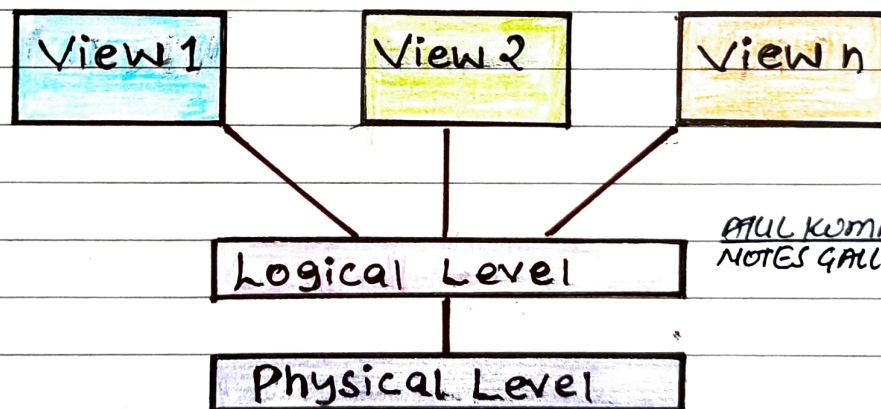


RDBMS stands for Relational Database Management System and was introduced in 1970s to access and store data more efficiently than **DBMS**.

RDBMS stores data in the form of tables as compared to **DBMS** which stores data as files. Storing data as rows and columns makes it easier to locate specific values in the database and makes it efficient as compared to **DBMS**.

Example of popular **RDBMS** systems are **MySQL**, **Oracle DB**, etc.,

- Explain different levels of data abstraction in a **DBMS**.



PAUL KUMAR (LINKEDIN)
NOTES GALLERY (TELEGRAM)

Three levels of data abstractions.

Physical Level: It is the lowest level and is managed by **DBMS**, this level consists of data storage descriptions and the details of this level are typically hidden from system admins, developers, and users.





Conceptual or logical level :

It is the level on which developers and System admins works and it determines what data is stored in the data base and what is the relationship between the data points.

External or view level :

It is the level that describes the only part of the database and hides the details of tables schema and its physical storage from the users. The result of a query is an example of view level data abstraction.

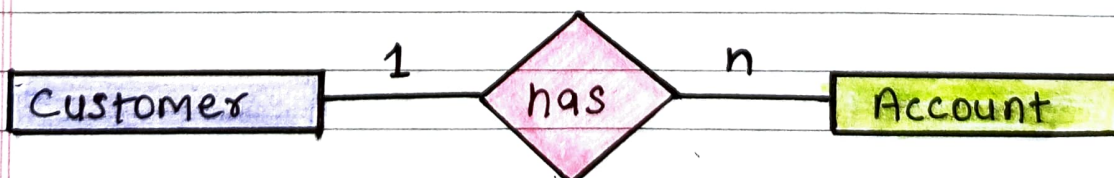
- Explain different types of relationships amongst table in DBMS.

One to one Relationship: This type of relationship is applied when a particular row in table 'X' is linked to singular row in table 'Y'.



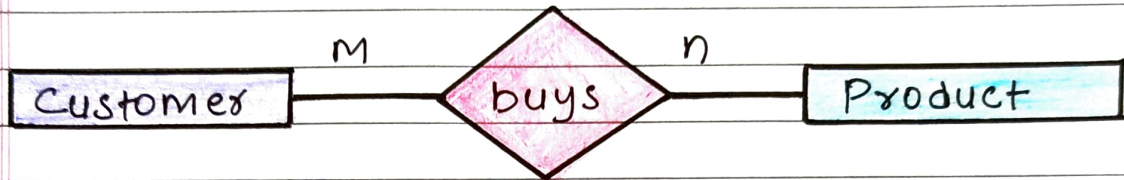
ATUL KUMAR (LINKEDIN).
NOTES GALLERY (TELEGRAM)

One to many Relationship : This type of relationship is applied when a single row table 'X' related to many rows in table 'Y'.



→ Many to Many Relationships :

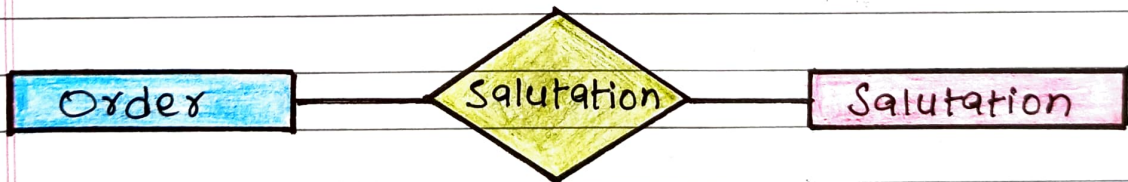
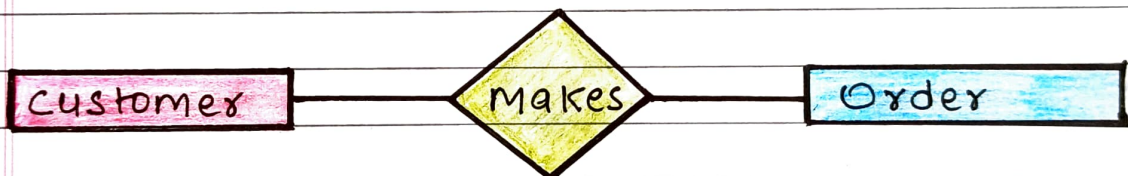
This type of relationship is applied when multiple rows in table 'X' can be linked to multiple rows in table 'Y'.



Self Referencing Relationship :

This type of relationship is applied when a particular row in table 'X' is associated with the same table.

ATUL KUMAR (LINKEDIN).
NOTES GALLERY (TELEGRAM).



Salutation

Salutation

Salutation

customer Id
Name
Age
Mobile_No

Order Id
customer Id
Product Id

Product Id
Product Name
Price
Mobile.No.
Date

- Explain the difference between intension and extension in a data base.

Intension:

Intension or popularly known as **data-base Schema** is used to define the description of the data base and is specified during the **design** of the database and mostly remains **unchanged**.

ATUL KUMAR (LINKEDIN).
NOTES GALLERY (TELEGRAM).

Extension:

Extension on the other hand is the measure of the **number of tuples** present in the data-base at any **given point in Time**. The extension of a database is also referred to as the **Snapshot** of the database and its value keeps **changing as** and when tuples are created, updated, or destroyed in a data base.