* **What do you understand By Database**

-> A database is an organized collection of structured information, or data, typically stored electronically in a computer system.

* **What is Normalization?**

**->** Normalization is the process of organizing data in a database. It include creating tables and establishing relectionship between those table

**->** Normalization is the process where a database is designed in a way that removes

redundancies, and increases the clarity in organizing data in a database.

**->** Through normalization, the collection of data in single table will be distributed

**->** over several tables with specific relationship between them.

* **What is Difference between DBMS and RDBMS?**

**->** DBMS:- Satnd for Data base Management System

**->** DBMS Stores data as file.

**->** No relationship between data.

**->** Normalization is not present.

**->** RDBMS:- Stand for Relational Database Management System

**->** RDBMS stores data in tabular form.

**->** Data is stored in the form of tables which are related to each other.

**->** Normalization is present.

* **What is MF Cod Rule of RDBMS Systems?**

-> Codd’s rules are proposed by a computer scientist named Dr. Edgar F. Codd and he also invent the relational model for database management. These rules are made to ensure data integrity, consistency, and usability.

-> **The Information Rule:** All information, whether it is user information or metadata, that is stored in a database must be entered as a value in a cell of a table. It is said that everything within the database is organized in a table layout.

-> **The Guaranteed Access Rule:** Each data element is guaranteed to be accessible logically with a combination of the table name, primary key (row value), and attribute name (column value).

-> **Systematic Treatment of NULL Values**: Every Null value in a database must be given a systematic and uniform treatment.

-> **Active Online Catalog Rule**: The database catalog, which contains metadata about the database, must be stored and accessed using the same relational database management system.

-> **The Comprehensive Data Sublanguage Rule**:A crucial component of any efficient database system is its ability to offer an easily understandable data manipulation language (DML) that facilitates defining, querying, and modifying information within the database.

-> **The View Updating Rule**: All views that are theoretically updatable must also be updatable by the system.

-> **High-level Insert, Update, and Delete**: A successful database system must possess the feature of facilitating high-level insertions, updates, and deletions that can grant users the ability to conduct these operations with ease through a single query.

-> **Physical Data Independence**: Application programs and activities should remain unaffected when changes are made to the physical storage structures or methods.

-> **Logical Data Independence** : Application programs and activities should remain unaffected when changes are made to the logical structure of the data, such as adding or modifying tables.

-> **Integrity Independence**: Integrity constraints should be specified separately from application programs and stored in the catalog. They should be automatically enforced by the database system.

-> **Distribution Independence**: The distribution of data across multiple locations should be invisible to users, and the database system should handle the distribution transparently.

-> **Non-Subversion Rule**: If the interface of the system is providing access to low-level records, then the interface must not be able to damage the system and bypass security and integrity constraints.

* **What do you understand By Data Redundancy?**

-> Data redundancy occurs when the same piece of data exists in multiple places,

* **What is DDL Interpreter?**

**-> DDL:-** Stand for data definition language.

-> DDL commands include CREATE, ALTER, DROP, and TRUNCATE.

**->** It is used to define structure of database and tables.

-> Interpreter perform line by lin code.

* **What is DML Compiler in SQL?**

-> DML Stand for data manuplete language

-> DML commands include SELECT, INSERT, UPDATE, DELETE.

-> DML is used to manipulate the data itself within the database.

-> Compiler compile hole code.

* **What is SQL Key Constraints writing an Example of SQL Key Constraints**

-> The primary key constraint uniquely identifies each record in a table . primary keys must contain unique value and cannot contain null values

* **What is save Point? How to create a save Point write a Query?**

-> Savepoint is a command in SQL that is used with the rollback command.

-> It is a command in Transaction Control Language that is used to mark the transaction in a table.

-> Syntax:- SAVEPOINT savepoint\_name;

* **What is trigger and how to create a Trigger in SQL?**

-> Trigger is a statement that a system executes automatically when there is any modification to the database.

-> A trigger is Sql store procedure that automatically execute in responce to a specific event such as insert,update,delete or Truncate statement on a specificed table or view

-> Syntax:- CREATE TRIGGER [schema\_name.]trigger\_name

ON table\_name

AFTER {[INSERT], [UPDATE], [DELETE]}

[NOT FOR REPLICATION]

AS {sql\_statements};