1. What do you understand by Database?

* A database is an organized collection of structural information, or data, typically stored electronically in a computer system.
* A database is usually controlled by a database management system (DBMS).

1. What is Normalization?

* Normalization is a process of organizing data in a database. This includes creating tables & establishing relationship between those tables according to rules designed both to protect the data & to make the database more flexible by eliminating redundancy & inconsistent dependency.
* 1NF (first normal form), 2NF (second normal form), 3NF (third normal form) are the first three types of database normalization. There are also 4NF (fourth normal form) & 5NF (fifth normal form).

1. What is Difference between DBMS and RDBMS?

* DBMS stands for Database Management System & RDBMS stands for Relational Database Management System.
* In DBMS, the data is stored as a file, whereas in RDBMS, data is stored in the form of tables.

1. What is MF Cod Rule of RDBMS Systems?

* This rule states that for a system to qualify as an RDBMS, it must be able to manage database entirely through the relational capabilities.

1. What do you understand by Data Redundancy?

* Data Redundancy occurs when the same piece of data exist in multiple places, whereas data inconsistency is when the same data exists in different formats in multiple tables.

1. What is DDL Interpreter?

* DDL (Data Definition Language) as the name suggests interprets the DDL statements such as schema definition statements like create, delete, etc. The result of this interpretation is a set of a table that contains the meta-data which is stored in the data dictionary.

1. What is DML Compiler in SQL?

* A DML (Data Manipulation Language) is a computer programming language used for inserting, deleting, & modifying(updating) data in a database.
* DML compiler translates DML statements in a query language into a low-level instruction & the generated instructions can be understood by Query Evaluation Engine.

1. What is SQL key constraints, Write an example of SQL key constraints.

* SQL constraints are used to specify rules for the data in a table.
* Constraints can be column level which applies to the column or can be of table level which applies to the whole table.
* The following constraints are commonly used in SQL:

1. NOT NULL
2. UNIQUE
3. PRIMARY KEY
4. FOREIGN KEY
5. CHECK
6. DEFAULT
7. CREATE INDEX
8. What is save point? How to create a save point, write a query?

* Save point is a point in a transaction when we can roll the transaction back to a certain point without rolling back the entire transaction.
* Syntax:

**SAVEPOINT SAVEPOINT\_NAME;**

1. What is trigger and how to create a trigger in SQL?

* Trigger is a special type of stored procedure that automatically runs when an event occurs in the database server.
* Syntax:

**CREATE TRIGGER [TRIGGER\_NAME]**

**[BEFORE | AFTER]**

**{INSERT | UPDATE | DELETE}**

**ON [TABLE\_NAME]**

**[FOR EACH ROW]**

**[TRIGGER\_BODY]**