• What do you understand By Database?

Ans- A database is information set up so that it can be easily accessed, managed, and updated. Computer databases typically store collections of records or files containing information such as sales transactions, customer data, financial data, product information, and so on. Databases are used to store, maintain, and access data. Collect information about people, places, and things. This information is collected in one place for observation and analysis. A database can be viewed as an organized collection of information.

• What is Normalization?

Ans- Normalization is a database design technique that reduces data redundancy and eliminates unnecessary features such as insert, update, and delete anomalies. Normalization rules divide large tables into smaller tables and join them using relationships. The purpose of normalization in SQL is to eliminate redundant (repetitive) data and ensure that data is stored logically.

• What is Difference between DBMS and RDBMS?

|  |  |
| --- | --- |
| **RDBMS** | **DBMS** |
| Data stored is in table format | Data stored is in the file format |
| Multiple data elements are accessible together | Individual access of data elements |
| Data in the form of a table are linked together | No connection between data |
| Normalisation is not achievable | There is normalisation |
| Support distributed database | No support for distributed database |
| Data is stored in a large amount | Data stored is a small quantity |
| Here, redundancy of data is reduced with the help of key and indexes in RDBMS | Data redundancy is common |
| RDBMS supports multiple users | DBMS supports a single user |
| It features multiple layers of security while handling data | There is only low security while handling data |
| The software and hardware requirements are higher | The software and hardware requirements are low |
| Oracle, SQL Server. | XML, Microsoft Access. |

• What is MF Cod Rule of RDBMS Systems?

Ans- Cod's Twelve Rules is a set of thirteen rules (numbered from 0 to 12) proposed by Edgar F. Cod, a pioneer of the relational model of databases, to help database management systems: defines what is required to be considered as relational, or relational database management system (RDBMS)

• What do you understand By Data Redundancy?

Ans- Redundancy means having multiple copies of same data in the database. This problem arises when a database is not normalized.

• What is DDL Interpreter?

Ans- It processes the DDL statements into a set of table containing meta data (data about data).

• What is DML Compiler in SQL?

Ans- It processes the DML statements into low level instruction (machine language), so that they can be executed.

• What is SQL Key Constraints writing an Example of SQL Key Constraints?

Ans- SQL constraints are used to specify rules for the data in a table. Eg:-

CREATE TABLE Colleges ( college\_id INT NOT NULL, college\_code VARCHAR(20) NOT NULL, college\_name VARCHAR(50) );

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

Ans- Save point 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.

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

Ans- A trigger is a stored procedure in database which automatically invokes whenever a special event in the database occurs.

Create Trigger eg:-

CREATE TRIGGER [schema\_name.]trigger\_name ON table\_name AFTER {[INSERT],[UPDATE],[DELETE]} AS {sql\_statements}