

What do you understand By Database

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

What is Normalization?

Ans **Database normalization** or **database normalisation** (see spelling differences) is the process of structuring a relational database in accordance with a series of so-called ***normal forms*** in order to reduce data redundancy and improve data integrity. It was first proposed by British computer scientist Edgar F. Codd as part of his relational model.

Normalization entails organizing the columns (attributes)

and tables (relations) of a database to ensure that their dependencies are properly enforced by database integrity constraints. It is accomplished by applying some formal rules either by a process of *synthesis* (creating a new database design) or *decomposition* (improving an existing database design).

What is Difference between DBMS and RDBMS?

Ans **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 Codd's Rule of RDBMS Systems?

Ans Codd's twelve rules are a set of thirteen rules (numbered zero to twelve) proposed by Edgar F. Codd, a pioneer of the relational model for databases,

designed to define what is required from a database management system in order for it to be considered relational, i.e., a relational database management system (RDBMS).

What do you understand By Data Redundancy?

Ans Data redundancy **occurs when the same piece of data exists in multiple places**, whereas data inconsistency is when the same data exists in different formats in multiple tables. Unfortunately, data redundancy can cause data inconsistency, which can provide a company with unreliable and/or meaningless information.

What is DDL Interpreter?

Ans DDL Interpreter DDL expands to Data Definition Language. DDL Interpreter 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.

What is DML Compiler in SQL?

Ans A data manipulation language (DML) is a **computer programming language used for adding (inserting), deleting, and modifying (updating) data in a database.** A DML is often a sublanguage of a broader database language such as SQL, with the DML comprising some of the operators in the language.

What is SQL Key Constraints writing an Example of SQL Key Constraints SQL constraints are **used to specify rules for the data in a table**. Constraints are used to limit the type of data that can go into a table. This ensures the accuracy and reliability of the data in the table. If there is any violation between the constraint and the data action, the action is aborted

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

Ans A SAVEPOINT is a point in a transaction when you can roll the transaction back to a certain point without rolling back the entire transaction. The syntax for a SAVEPOINT command is as shown below. **SAVEPOINT SAVEPOINT\_NAME;** This command serves

only in the creation of a SAVEPOINT among all the transactional statements.

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

Ans A trigger is a special type of stored procedure that automatically runs when an event occurs in the database server. DML triggers run when a user tries to modify data through a data manipulation language (DML) event. DML events are INSERT, UPDATE, or DELETE statements on a table or view