

1. What do you understand By Database?
→ Database is a Collection of interrelated data and management System is a set of programming to store and retrieve those data.

ex. Example University database organizes the data about Student, faculty, and admin staff etc. which help in efficient retrieval.

2. What is Normalization?

→ Normalization is the process of minimizing redundancy (duplicity) from a relation or set relations.

→ A relation is in first normal form if every attribute in that relation is single valued attribute.

⇒ Example: Relation STUDENT in table 1 is not in 1NF because of multi-valued attribute Stud phone. its decomposition into 1NF been shown in table.

3. What is Difference between DBMS and RDBMS?

→ DBMS ÷ is a Collection of interrelated data and set of programs to store & access those data in an easy and effective manner.

→ A DBMS Consists of 2 main pieces.

1. the data

2. the DB engine.

→ Two most common types of DBMS

1. Local

2. Server.

→ Multiple data elements are accessible together.

→ RDBMS ÷ Stands for "Relational Database Management System."

→ An RDBMS is a type of DBMS designed specifically for relational database.

→ The RDBMS refers to the that executes queries on the data including adding, updating, and software searching for values.

4. What is MF Cod Rule of RDBMS Systems?

⇒ There are 12 Rules in RDBMS.

1. Information Rule: The data stored in database must be value of some table cell.
2. Guaranteed Access Rule: Every single data value is guaranteed to be accessible logically.
3. Systematic Treatment of null values: The null values in a database must be given a systematic & uniform treatment.
4. Active online Catalog: The structure of database must be stored in an online catalog Data Dictionary.
5. Comprehensive data sub Language Rule: A database can only be accessed using a language having a liner syntax.

then Supports data operation

6. view updating Rule: All the views of a database which can be updated by system & theorems
7. High level insert update & delete: A database must support high level insert, updates delete.
8. Physical data independence: The data stored in a database must be independence of the database
9. Logical data independence: The Logical data in database must be independent of its users view.
10. Integrity independence: A database must be independent that uses it.

11. Distribution Independence: the end user must not be able to see that the data is distributed over various locations

12. Non-Subversion Rule: If a system bus and interface then provide access to low level records

§ when do you understand by Data Redundancy?

→ Data Redundancy occurs when the same piece of data exists in multiple places where as data inconsistency is when the same data exists in different formats in multiple tables.

Q6 What is DDL interpreter?

⇒ DDL interpreter - It processes the DDL Statement into a set of table containing meta data

→ Embedded DML Pre-Compiler - It process DML Statements embedded in an application program into procedural calls.

→ Query optimizer - It executes the instruction generated by DML compiler

Q7 What is DML Compiler in SQL?

→ It processes the DML Statement into low level instruction so that they can be executed

8. What is SQL key Constraints? write an example.

→ SQL Constraints are used to specify rules for the data in table. Constraints are used to limit the type of data that can go into table this ensure the accuracy & reliability of data in table.

ex

Not NULL

Unique

primary key

foreign key.

9. What is Save point? How to create a save point? write a query.

→ A save point is a point in transaction when you can roll the transaction back to a certain point without rolling back the entire transaction.

Q What is trigger and how to create a trigger in SQL

→ A trigger is a stored procedure in database which automatically invokes whenever a specific event in the database occurs.

eg a trigger can be invoked when a row is inserted into a specified table.

Syntax

Create trigger, trigger name
before / after

{insert / update / delete}

on table_name for each row.
trigger body