

1.what is data?

Database is a collection of information organized for easy access, management and maintenance.

2.what do you understand by Database?

A database is systematically organized storage of information, and it allows easy insertion,updating,analysis,and retrieval of old data.

3.How the database is used in the websites ?

- There are many dynamic websites on the World wide web nowadays which are handled through database.
- for example, a model that checks the availability of rooms in a hotel.
- It is an example of a dynamic websites that uses a database.

4.What is Difference between DBMS and RDBMS?

RDBMS	DBMS
Data stored is in table format	Data stored is in the file format
Multiple data element are accessible together	Individual access of data element
Data in the form of a table are linked together	No connection between data
Normalization is not achievable	There is normalization
Support distributed database	No support for distributed database
Data is stored 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 support multiple users	DBMS support a single user
The software and hardware requirement are higher	The software and hardware requirement and low
Oracle, SQL Server	XML,Microsoft Access.

FOUNDATION RULE

INFROMATION RULE

GUARANTEED ACCESS

SYSTEMATIC TREATMENT OF NULL VALUES

ACTIVE ONLINE CATLOUGE

POWERFUL AND WELL STRUCTURED LANGUAGE

VIEW UPDATION RULE

PHYSICAL DATA INDEPNEDENCE

RELATION LEVEL OPERATION

LOGICAL DATA INDEPNEDENCE

INTEGRITY INDEPNEDECE

DISTRIBUTION INDEPNEDECE

NON-SUBDIVISON RULE

Rule 1: Information Rule

The data stored in a database, may it be user data or metadata, must be a value of some table cell. Everything in a database must be stored in a table format.

Rule 2: Guaranteed Access Rule

Every single data element (value) is guaranteed to be accessible logically with a combination of table-name, primary-key (row value), and attribute-name (column value). No other means, such as pointers, can be used to access data.

Rule 3: Systematic Treatment of NULL Values

The NULL values in a database must be given a systematic and uniform treatment. This is a very important rule because a NULL can be interpreted as one the following – data is missing, data is not known, or data is not applicable.

Rule 4: Active Online Catalog

The structure description of the entire database must be stored in an online catalog, known as a data dictionary, which can be accessed by authorized users. Users can use the same query language to access the catalog which they use to access the database itself.

Rule 5: Comprehensive Data Sub- Language Rule

A database can only be accessed using a language having linear syntax that supports data definition, data manipulation, and transaction management operations. This language can be used directly or by means of some application. If the database allows access to data without any help of this language, then it is considered as a violation.

Rule 6: View Updating Rule

All the views of a database, which can theoretically be updated, must also be updatable by the system.

Rule 7: High-Level Insert, Update, and Delete Rule

A database must support high-level insertion, updation, and deletion. This must not be limited to a single row, that is, it must also support union, intersection and minus operations to yield sets of data records.

Rule 8: Physical Data Independence

The data stored in a database must be independent of the applications that access the database. Any change in the physical structure of a database must not have any impact on how the data is being accessed by external applications.

Rule 9: Logical Data Independence

The logical data in a database must be independent of its user's view (application). Any change in logical data must not affect the applications using it. For example, if two tables are merged or one is split into two different tables, there should be no impact or change on the user application. This is one of the most difficult rule to apply.

Rule 10: Integrity Independence

A database must be independent of the application that uses it. All its integrity constraints can be independently modified without the need of any change in the application. This rule makes a database independent of the front-end application and its interface.

Rule 11: Distribution Independence

The end-user must not be able to see that the data is distributed over various locations. Users should always get the impression that the data is located at one site only. This rule has been regarded as the foundation of distributed database systems.

Rule 12: Non-Subversion Rule

If a system has an interface that provides access to low-level records, then the interface must not be able to subvert the system and bypass security and integrity constraints.

6.What is DDL interpreter?

Data definition language is a subset of SQL and part of DBMS (database management system).

DDL consists of commands to commands like CREATE,ALTER,TRUNCATE AND DROP.

These commands are used to create or modify the tables in SQL.

DDL commands

1. Create
2. Alter
3. Truncate
- Drop

7.What DML compiler is SQL?

Database management system(DBMS) is software that allows access to data stored in a database and provides an easy and effective method of-

- Defining of information
- Storing the information
- Manipulating the information
- Protecting the information from system crasher or data theft.
- Differentiating access permission for different users.

8. 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.

- ❖ NOT NULL
- ❖ UNIQUE
- ❖ PRIMARY KEY
- ❖ FOREIGN KEY
- ❖ CHECK
- ❖ DEFAULT
- ❖ CREATE INDEX

9.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 the transaction control language that is used to mark the transaction in a table.

10.What is Trigger and how to create a Trigger in Sql ?

A Trigger is a set of actions that are run automatically when a specified change operation(SQL insert,update or delete statement) is performed on a specified table.Trigger are useful for tasks such as enforcing business rules,

Trigger are the sql statement or stored procedures the are executed automatically in order to the execution of any event.

6 different types of triggers in MYSQL.

1. Before Update Trigger
2. After Update Trigger
3. Before Insert Trigger
4. After Insert Trigger
5. Before Delete Trigger
6. After delete Trigger

