MODULE-5 DATABASE

Q.1 What do you understand by database?

Answer:

Database is one kind of managing system to manage the huge amount of data.

It’s called database management system.

Database system is comprised of two things first one is database another one is DBMS.

Database is collection of related data.

Simply database means where a lot of data is collected.

Database management system is software that provide user to store data.

Example of DBMS is MYSQL, ORACLE, etc.

2 what is normalization?

Answer:

Normalization is the process of organizing the data in the database.

Normalization is used to minimize the redundancy from a relational or set of relational.

It helps in remove duplicate information.

Help to keep data consistent.

Make data easier to manage.

Q.3 Difference between DBMS and RDBMS.

DBMS : Stands for database management system.

* + - Stores data as a file.
    - Normalization is not present.
    - It allows one user at a time.
    - DBMS does not any type of security with regards to data manipulate(access, store, update )
    - It deals with small data and single user.
    - Ex : File system, xml etc..

RDBMS : Relational database management system.

* + - Store data as a table form.
    - Normalization is present.
    - It allows one or more user at a time.
    - It deals with large amount of data and support multiple user.
    - Ex : MYSQL, ORACLE etc..

Q.4 What is MF Code Role of RDBMS System ?

Answer:

In relational database management system , data organization is crucial for efficiency and scalability.

What is mf code?

Mf code rules refers to the multivalued, first second and third normal forms.

they are with proper designing database.

Role of MF code in RDBMS:

1. Data consistency
2. Scalability
3. Data integrity

Q 5 What do you understand by data redundancy?

Answer:

Data redundancy ensures an organization can provide continued operation or service in the event something happens to its data-for ex. In the case of data corruption or data loss.

Data redundancy can occur within an organization intentionally or accidentally.

This data is often used for backups or disaster recovery.

Redundant information that is unneeded or duplicate.

Q 6 What is DDL interpreter ?

Answer:

DDL stands for data definition language.

It used to define the schema or structure of database.

DDL is set of commands which are used to create, update or delete structure of data base.

COMMAND DESCRIPTION

|  |  |
| --- | --- |
| CREATE | Create a new table, a view of table, or other objects in database. |
| ALTER | Modifies an existing database object, such as a table. |
| DROP | Delete an entire table. |

Q 7 What is DML compiler in SQL ?

Answer:

DML stands for data manipulation language.

DML is set of commands which are used to Insert, update or delete structure of records in a database.

|  |  |
| --- | --- |
| COMMAND | DESCRIPTION |
| INSERT | Creates a record. |
| UPDATE | Modifies records. |
| DELETE | Delete records. |
|  |  |

8 What is SQL key constrains writing an example of SQL key constrains.

SQL key constrains are rules applied to columns in a database table to enforce data integrity and ensure the uniqueness or integrity of data.

There is different type of key constrains.

1.Primary key :

This constrains uniquely identifies each record in a table. It must contain unique values and cannot contain NULL values.

Example :

CREATE TABLE employee

( Emp\_Id INT PRIMARY key,

Firstname VARCHAR(50), lastname VARCHAR(50)

);

1. Unique key :

Similar to primary key constrains, but it allows for NULL values. It ensure that all values in a column are unique.

Example :

CREATE TABLE students

( studentID INT UNIQUE,

Firstname VARCHAR(50), lastname VARCHAR (50)

);

1. Foreign key constrains :

Ensures referential integrity by enforcing a link between in two tables. The foreign key column in one table must match a primary key value in another table, or be NULL if allowed.

CREATE TABLE order

( order\_id INT PRIMARY key,

Product\_id INT, quantity INT, FOREIGN key (product\_id)

REFERENCE products (product\_id)

);

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

Answer:

SAVEPOINT is a one type of transaction control.

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

SYNTAX: SAVEPOINT SAVEPOINT\_ NAME ;

These commands only in the certain of a SAVEPOINT among all the transactional statements. The ROLLBACK command is used to undo a group of transaction.

10 What is trigger and how to create a trigger in sql ?

Answer:

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

Trigger can invoked when a row is insert into a specified table.

Trigger can be defined on the table, view, schema or database which the event is associated.

Syntax :

Create trigger [ trigger\_name ] [before | after]

{ insert | update | delete} on [table\_name] [for each row][trigger\_body]