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1 . what is RDBMS

Relational Database Management System (RDBMS) is an advanced version of a DBMS system. It came into existence during 1970's. RDBMS system also allows the organization to access data more efficiently than DBMS.

RDBMS is a software system which is used to store only data which need to be stored in the form of tables. In this kind of system, data is managed and stored in rows and columns which is known as tuples and attributes. RDBMS is a powerful data management system and is widely used across the world

2 . WHAT IS SQL

SQL stands for "Structured Query language"

SQL is the standard language for dealing with Relational Databases. SQL can be used to insert, search, update, and delete database records. SQL can do lots of other operations, including optimizing and maintenance of databases.

Here are important reasons for using SQL :-

- It helps users to access data in the RDBMS system.**
- It helps you to describe the data.**
- It allows you to define the data in a database and manipulate that specific data.**

- With the help of SQL, you can create and drop databases and tables
- SQL offers you to use the function in a database, create a view, and stored procedure.
- You can set permissions on tables, procedures, and views.

3 . WRITE SQL COMMANDS

ANS- SQL COMMANDS :-

DDL -DATA DEFINATION LANGUAGE

DML- DATA MANIPULATION LANGUAGE

DCL- DATA CONTROL LANGUAGE

DQL- DATA QUERY LANGUAGE

DDL - DATA DEFINATION LANGUAGE

Command	description
Create	creates a new table , a view of a table , or other object in database
Alter	modifies an existing database object , such as a table
Drop	deletes an entire table , view of a table or other object in the database in the database,

DML- data manipulation language

command	description
Insert	creates a records
Update	modifies record
Delete	deletes records

DCL - DATA CONTROL LANGUAGE

Command	description
Grant	gives a privilege to user
Revoke	takes back privileges a granted from users

DQL- DATA QUERY LANGUAGE

Command	description
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Select	retrieves certain records from one more table
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4 . WHAT IS JOINS

Introduction:- SQL joins are used to fetch or retrieve data from two or more data tables, based on a join condition. A join condition is a relationship among some columns in the data tables that take part in Sql join. Basically data tables are related to each other with keys. We use these keys relationship in Sql joins. A primary key is a column or a combination of columns with a unique value for each row. Each primary key value must be unique within the table. The purpose is to bind data together, across tables, without repeating all of the data in every table.

5 . WRITE TYPE OF JOIN

Types of Joins: There are different types of join, they are

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SQL Join Types :-

- **INNER JOIN:** returns rows when there is a match in both tables.

- **LEFT JOIN:** returns all rows from the left table, even if there are no Matches in the right table.

- **RIGHTJOIN:** returns all rows from the right table, even if there are no

Matches in the left table.

- **FULLJOIN:** returns rows when there is a match in one of the tables.

INNER JOIN:

The most frequently used and important of the joins is the **INNER JOIN**. They are also referred to as an **EQUI JOIN**.

The **INNER JOIN** creates a new result table by combining column values of two tables (table1 and table2) based upon the join predicate. The query compares each row of table1 with each row of table2 to find all pairs of rows which satisfy the join-predicate. When the join-predicate is satisfied, column values for each matched pair of rows of A and B are combined into a result row. The **INNER JOIN** in SQL joins two tables according to the matching of a certain criteria using a comparison operator.

LEFT JOIN:

The **SQL LEFT JOIN** returns all rows from the left table, even if there are no matches in the right table. This means that if the **ON** clause matches 0 (zero) records in right table, the join will still return a row in the result, but with **NULL** in each column from right table.

This means that a left join returns all the values from the left table, plus matched values from the right table or **NULL** in case of no matching join predicate.

RIGHT JOIN:

The **SQL RIGHT JOIN** returns all rows from the right table, even if there are no matches in the left table. This means that if the **ON** clause matches 0 (zero) records in left table, the join will still return a row in the result. But with **NULL** in each column from left table.

This means that a right join returns all the values from the right table, plus matched values from the left table or **NULL** in case of no matching join predicate.

FULL JOIN:

In SQL the FULL OUTER JOIN combines the results of both left and right outer joins and returns all matched or unmatched rows from the tables on both sides of the join clause.

6 . HOW MANY CONSTRAINT AND DESCRIBES IT SELF

1. not null constraints

Not NULL constraints prevent null values from being entered into a column.

2. Unique constraints ensure that the values in a set of columns are unique and not null for all Rows in the table . the columns specified in a unique constraint must be defined as not NULL.

The database manager uses a unique index to enforce the uniqueness of the key during Changes to the columns of the unique constraint

3. Primary key constraints

You can use primary key and foreign key constraints to define relationship between Table.

4. Check constraints

A check constraint specifies the value allowed in one or more columns of every row of Table. Specifying check constraints is done through a restricted form of a search Condition.

5. Foreign key constraints

Foreign key constraints (also known as referential constraints or referential integrity constraints)

Enable definition of required relationships between and within tables.

6. Informational constraints

An informational constraint is a constraint attribute that can be used by SQL Compiler to improve the access to data. Informational constraints are not enforced By the database manager, and are not used for additional verification of data; rather they are Used to improve query performance.

7 . DIFFERENT BETWEEN RDBMS VS DBMS

DBMS

**=>DBMS stores data as files.
forms.**

**=>Data elements needs to access individual
accessed**

**=> no relationship between data.
which**

=> normalization is not present.

**=>DBMS does not support distributed
database.**

Database

=>it stores data in either a navigations

**Or hierarchical form.
and the**

**values =>it deals with small quantity of data.
of data. =>data redundancy is common in this model.
allow data**

**=>it is used for small organization and deal with
of**

Small data

=> it support singel user.

**=> data fetching is slower for the large amount
relational**

Of data

**=>the data in a DBMS is subject to low security
security**

RDBMS

=> RDBMS stores data in tabular

=>multiple data elements can be

At The same time

=> data is stored in the form of tables

Are related to each other

=> normalization is present.

=>RDBMS supports distributes

=>it uses a tabular structure where the

Headers are the column names,

Rows contain corresponding

=> it deals with large amount

=> keys and indexes do not

Redundancy.

=>it is used to handel large amount

data

=> it support multiple users.

=>data fetching is fast because of

approach

=>there exits multiple levels of data

Level with regards to data manipulation

=>low software and hardware necessities.

=>examples: XML,window registry ets.
server,

in a RDBMS

=>higher software and hardware

=>example: MySQL, postgresQL,SQL

Oracle , microsoft

access etc.

8 . WHAT IS API TESTING

API TESTING is a software testing type that validates Application Programming Interfaces (APIs). The purpose of API Testing is to check the functionality, reliability, performance, and security of the programming interfaces. In API Testing, instead of using standard user inputs(keyboard) and outputs, you use software to send calls to the API, get output, and note down the system's response. API tests are very different from GUI Tests and won't concentrate on the look and feel of an application. It mainly concentrates on the business logic layer of the software architecture.

API Testing image

For background, API (Application Programming Interface) is a computing interface that enables communication and data exchange between two separate software systems. A software system that executes an API includes several functions/subroutines that another software system can perform. API defines requests that can be made, how to make requests, data formats that can be used, etc., between two software systems.

9 . TYPES OF API TESTING

- 1. openAPIs**
- 2. Partner APIs**
- 3. Internal APIs**

10 . WHAT IS RESPONSIVE TESTING

Responsive testing is a process that web pages on viewports of multiple devices usinf CCS media

Queries bases on the user device where the website IS ACCESSED. IN SIMPLE TERMS, RESPONSIVE

TESTING ENSURES HOW RESPONIVE WEB DESIGN IS OPTImized well for all types of screen sizes

And resolution

11 . WHICH TYPES OF TOOLS ARE AVAILABLE FOR RESPONSIVE TESTING

- 1. LT BROWSER**
- 2. LEMBDA TESTING**
- 3. GOOGLERESIZER**
- 4. IAMRESPONSIVE**
- 5. PIXELTUNER**

12 . WHAT IS THE FULL FORM OF . IPA, APK

.ipa international phonetic alphabet

.apk: android package kit

13 HOW TO CREATE STEP FOR TO OPEN THE DEVELOPERS OPTION MODE ON

- 1. Setting**
- 2. Additional setting**
- 3. Developer option**
- 4. Enter code**
- 5. Use**
- 6. Developer option on**