Assignment 3:-

**Q - What is RDBMS**

A - RDBMS stands for Relational Database Management System.

RDBMS is a program used to maintain a relational database.

RDBMS is the basis for all modern database systems such as MySQL, Microsoft SQL Server, Oracle, and Microsoft Access.

**Q - What is SQL**

A - SQL is a database language designed for the retrieval and management of data in a relational database.

SQL is the standard language for database management. All the RDBMS systems like MySQL, MS Access, Oracle, Sybase, Postgres, and SQL Server use SQL as their standard database language. SQL programming language uses various commands for different operations. We will learn about the like DCL, TCL, DQL, DDL and DML commands in SQL with examples.

**Q - Write SQL Commands**

A –

1. Data Definition Language (DDL)

Here are some commands that come under DDL:

* CREATE
* ALTER
* DROP
* TRUNCATE

2. Data Manipulation Language

Here are some commands that come under DML:

* INSERT
* UPDATE
* DELETE

3. Data Control Language

Here are some commands that come under DCL:

* Grant
* Revoke

4. Transaction Control Language

Here are some commands that come under TCL:

* COMMIT
* ROLLBACK
* SAVEPOINT

5. Data Query Language

It uses only one command:

* SELECT

**Q - What is join?**

A - A JOIN clause is used to combine rows from two or more tables, based on a related column between them.

**Q - Write type of joins.**

A - Here are the different types of the JOINs in SQL:

**(INNER) JOIN:** Returns records that have matching values in both tables

**LEFT (OUTER) JOIN:** Returns all records from the left table, and the matched records from the right table

**RIGHT (OUTER) JOIN:** Returns all records from the right table, and the matched records from the left table

**FULL (OUTER) JOIN:** Returns all records when there is a match in either left or right table

**Q - How Many constraint and describes it self**

A - 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.

Constraints can be column level or table level. Column level constraints apply to a column, and table level constraints apply to the whole table.

The following constraints are commonly used in SQL:

* **NOT** **NULL** - Ensures that a column cannot have a NULL value
* **UNIQUE** - Ensures that all values in a column are different
* **PRIMARY** **KEY** - A combination of a NOT NULL and UNIQUE. Uniquely identifies each row in a table
* **FOREIGN** **KEY** - Prevents actions that would destroy links between tables
* **CHECK** - Ensures that the values in a column satisfies a specific condition
* **DEFAULT** - Sets a default value for a column if no value is specified
* **CREATE INDEX** - Used to create and retrieve data from the database very quickly

**Q - Difference between DBMS vs RDBMS**

|  |  |
| --- | --- |
| **DBMS** | **RDBMS** |
| DBMS stores data as file. | RDBMS stores data in tabular form. |
| Data elements need to access individually. | Multiple data elements can be accessed at the same time. |
| No relationship between data. | Data is stored in the form of tables which are related to each other. |
| Normalization is not present. | Normalization is present. |
| DBMS does not support distributed database. | RDBMS supports distributed database. |
| It stores data in either a navigational or hierarchical form. | It uses a tabular structure where the headers are the column names, and the rows contain corresponding values. |
| It deals with small quantity of data. | It deals with large amount of data. |
| Data redundancy is common in this model. | Keys and indexes do not allow Data redundancy. |
| It is used for small organization and deal with small data. | It is used to handle large amount of data. |
| It supports single user. | It supports multiple users. |
| Data fetching is slower for the large amount of data. | Data fetching is fast because of relational approach. |
| The data in a DBMS is subject to low security levels with regards to data manipulation. | There exists multiple levels of data security in a RDBMS. |
| Low software and hardware necessities. | Higher software and hardware necessities. |
| Examples: XML, Window Registry, etc. | Examples: MySQL, PostgreSQL, SQL Server, Oracle, Microsoft Access etc. |

**Q - What is API Testing**

A - 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.

**Q - Types of API Testing**

A –

* **Open API** :- These type of API are publicly available to use like OAuth APIs from Google.it has not given any restriction to use them. So, they are also known as Public APIs.
* **Partner APIs** :- Specific right or licences to access this type of API because they are not available to public.
* **Internal APIs** :-Internal or Private. These APIs are developed by companies to use their internal systems. It helps you to enhance the productivity of your teams.

**Q - What is Responsive Testing?**

A - Responsive testing is a process that renders web pages on viewports of multiple devices using CSS media queries based on the user device where the website is accessed. In simple terms, responsive testing ensures how responsive web design is optimized well for all types of screen sizes and resolutions

**Q - Which types of tools are available for Responsive Testing**

A – Tools are as below:-

* LT Browser
* Lambda Testing
* Google Resizer
* I am Responsive
* Pixel Tuner

**Q - What is the full form of .ipa, .apk**

A –

.IPA :- An .ipa file is an iOS and iPadOS application archive file which stores an iOS/iPadOS app. Each

.APK :- The full form of APK is an Android Application Package.

**Q - How to create step for to open the developer option mode ON?**

A – Steps are as below :-

* Go to "Settings"
* Tap "About device" or "About phone"
* Tap “Software information”
* Tap “Build number” seven times. ...
* Enter your pattern, PIN or password to enable the Developer options menu.
* The "Developer options" menu will now appear in your Settings menu.