**Assignment – 3**

**1)What is RDBMS**

* RDBMS stands for Relational Database Management System.
* RDBMS is the basis for SQL, and for all modern database systems like MS SQL Server, IBM DB2, Oracle, MySQL, and Microsoft Access.
* Most of today's databases are relational:

1. database contains 1 or more tables
2. table contains 1 or more records
3. record contains 1 or more fields
4. fields contain the data

**2)What is SQL**

* SQL tutorial gives unique learning on Structured Query Language
* SQL is Structured Query Language, which is a computer language for storing, manipulating and retrieving data stored in relational database.
* SQL allows you to access a database
* SQL can execute queries against a database
* SQL can retrieve data from a database
* SQL is written in the form of queries

**3)Write SQL commands**

SQL Commands

* DDL – Data Definition Language
* DML – Data Manipulation Language
* DCL – Data Control Language
* DQL – Data Query Language

1)DDL - Data Definition Language:-

* 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, a view of a table or other object in the database.

2)DQL – Data Query Language:-

* SELECT - Retrieves certain records from one or more tables

3)DML – Data Manipulation Language:-

* INSERT - Creates a record
* UPDATE - Modifies records
* DELETE - Deletes records

4)DCL – Data Control Language:-

* GRANT - Gives a privilege to user
* REVOKE - Takes back privileges granted from user

A)SQL CREATE TABLE STATEMENT

CREATE TABLE table\_name( column1 datatype, column2 datatype, column3 datatype, ..... , columnN datatype, PRIMARY KEY( one or more columns ) );

B)SQL ALTER TABLE STATEMENT

ALTER TABLE table\_name{ADD|DROP|MODIFY}column\_name{data\_ype};

C)SQL DROP TABLE STATEMENT

DROP TABLE table\_name;

D)SQL INSERT INTO STATEMENT

INSERT INTO table\_name( column1, column2....columnN) VALUES ( value1, value2....valueN);

E)SQL UPDATE STATEMENT

UPDATE table\_name SET column1 = value1, column2 = value2....columnN=valueN [ WHERE CONDITION ];

F)SQL DELETE STATEMENT

DELETE FROM table\_name WHERE {CONDITION};

G)SQL SELECT STATEMENT

SELECT column1, column2....columnN FROM table\_name;

**4)What is Join?**

A join statement is used to combine data of rows from two or more tables based on a common field between them.

**5)Write type of joins.**

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.
* RIGHT JOIN: returns all rows from the right table, even if there are no matches in the left table.
* FULL JOIN: returns rows when there is a match in one of the tables.

1)Inner Join Syntax:-

SELECT table1.column1, table2.column2...FROM table1 INNER JOIN table2 ON table1.common\_filed = table2.common\_field;

2)Left Join Syntax:-

SELECT table1.column1, table2.column2...FROM table1 LEFT JOIN table2 ON table1.common\_filed = table2.common\_field;

3)Right Join Syntax:-

SELECT table1.column1, table2.column2...FROM table1 RIGHT JOIN table2 ON table1.common\_filed = table2.common\_field;

4)Full Join Syntax:-

SELECT table1.column1, table2.column2...FROM table1 FULL JOIN table2 ON table1.common\_filed = table2.common\_field;

**6)How many constraints and describes it self**

SQL constraints are used to specify rules for the data in table

NOT NULL :- Ensure that column cannot have null value

UNIQUE :- Ensure that values is column are different

PRIMARY KEY :- A combination of NOT NULL AND UNIQUE. Uniquely identifies each row in table

FOREIGN KEY :- Uniquely identifies a row/record in another table.

CHECK :- Ensure that all values in a column satisfy a specific condition

DEFAULT:- Sets a default value for column when no value is specified

INDEX :- Used to create and retrieve data from the database very quickly.

**7)Difference between RDBMS vs DBMS**

| **Sr No.** | **DBMS** | **RDBMS** |
| --- | --- | --- |
| 1 | DBMS stores data as a file | RDBMS data is stored in the form of tables |
| 2 | DBMS supports single user only | RDBMS supports multiple user |
| 3 | Low software and hardware needs | High hardware and software needs |
| 4 | Data elements needs to access individually | Multiple data elements can be accessed at the same time using SQL query |
| 5 | Example of DBMS are a file system, XML, Windows Registry | Example of RDBMS is MySQL, Oracle, SQL Server |

**8)What is API Testing?**

* Application Programming Interface (API) is a software interface that allows two applications to interact with each other without any user intervention
* 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.

**9)Types of API Testing**

Types of API Testing:-

There are mainly 3 types of API Testing:

**Open APIs :-** These types of APIs are publicly available to use like OAuth APIs from google. It has also not given any restriction to use them. So, they are also known as public APIs.

**Partner APIs :-** Specific rights or licenses to access this type of API because they are not available to the public

**Internal APIs :**- Internal or private. These APIs are developed by companies to use in their internal systems. It helps you to enhance the productivity of your teams.

**10)What is Responsive testing?**

* A responsive web design involves creating a flexible web page that is accessible from any device, starting from a mobile phone to a tablet.
* Furthermore, a responsive web design improves users’ browsing experience.
* Software testers may find it challenging to perform responsive design testing as a variety of factors are to be looked into during the testing phase.
* Some points to be understand for Responsive Testing.

1. The challenges involved in testing a responsive website
2. How website testing differs from a mobile device to a computer
3. Rules and guidelines to be followed during responsive design testing and
4. Lastly, various tools available to perform responsive testing

**11)Which types of tools are available for Responsive Testing**

Responsive Testing Tools:

* LT Browser
* Lembda Testing
* Google Resizer
* I am responsive
* Pixel tuner

**12)What is the full form of .ipa, .apk**

**.ipa :-** iOS App Store Package file

**.apk :-** Android Application Package file

**13)How to create step for to open the developer option mode ON?**

step1 : Go to settings> about PC

step2 : Tap software info> Build number

step3 : Tap build number seven times. After the first few taps , you should see the steps counting down until you unlock the developer options.