MODULE : 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.
- A Relational database management system (RDBMS) is a database management system (DBMS) that is based on the relational model as introduced by E. F. Codd.

2> What is SQL

- SQL tutorial gives unique learning on Structured Query Language and it helps to make practice on SQL commands which provides immediate results.
- SQL is a language of database, it includes database creation, deletion, fetching rows and modifying rows etc.
- SQL is an ANSI (American National Standards Institute) standard but there are many different versions of the SQL language.
- SQL is the standard programming language of relational DBs SQL is a standard computer language for accessing and manipulating databases.

3> Write SQL Commands

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

4> □ What is join?

- JOIN is an SQL clause used to query and access data from multiple tables, based on logical relationships between those tables.
- In other words, JOINS indicate how SQL Server should use data from one table to select the rows from another table.

5> Write type of joins.

- 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.

6> How Many constraint and describes it self

- **NOT NULL constraints**
  NOT NULL constraints prevent null values from being entered into a column.
- **Unique constraints**
  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.
- **Primary key constraints**
  You can use primary key and foreign key constraints to define relationships between tables.
- **(Table) Check constraints**
  A *check constraint* (also referred to as a *table check constraint*) is a database rule that specifies the values allowed in one or more columns of every row of a table. Specifying check constraints is done through a restricted form of a search condition.
- **Foreign key (referential) constraints**
  Foreign key constraints (also known as *referential constraints* or *referential integrity constraints*) enable definition of required relationships between and within tables.
- **Informational constraints**
  An *informational constraint* is a constraint attribute that can be used by the 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> Difference between RDBMS vs DBMS

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.
Not all Codd rules are satisfied.	All 12 Codd rules are satisfied.
Security is less	More security measures provided.
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, Forxpro, dbaseIIIplus etc.	Examples: MySQL, PostgreSQL, SQL Server, Oracle, Microsoft Access etc.

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
- another definition , API (Application Programming Interface) is a computing interface which enables communication and data exchange between two separate software systems.
- 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

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.
- Considering this from a quality assurance perspective, a responsive web design requires thorough evaluation using a variety of devices before it is ready to go live.
- 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.

11> Which types of tools are available for Responsive Testing

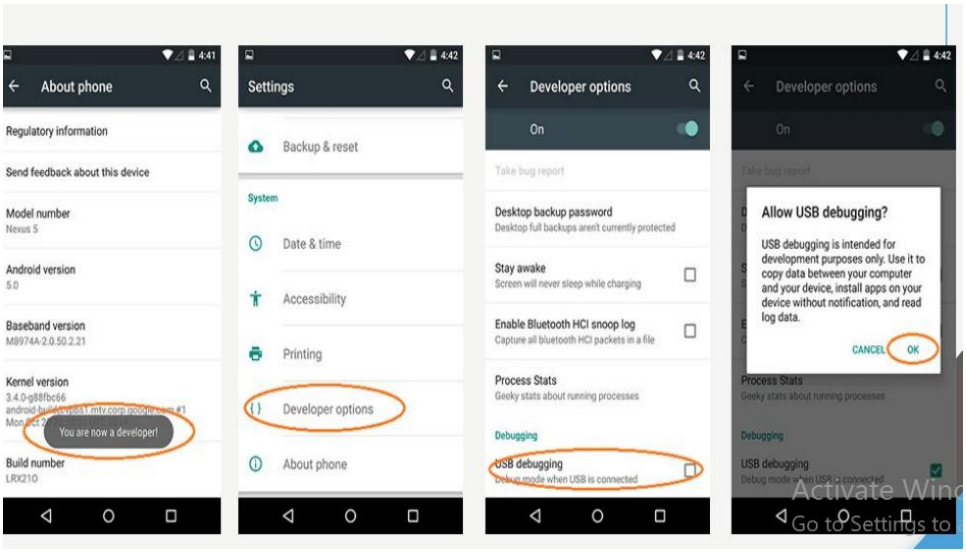
- LT Browser
- Lembda Testing
- Google Resizer
- I am responsive
- Pixel tuner

12> What is the full form of .ipa, .apk

.ipa: iPhone application archive file

.apk: Android Application Package

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



14> To check

CHECK is a SQL constraint that allows database users to enter only those values which fulfill the specified condition. If any column is defined as a CHECK constraint, then that column holds only TRUE values.