# Module 3 (Testing on Live Application)

1. **What is RDBMS**

   The software used to store, manage, query, and retrieve data stored in a relational database is called a relational database management system (RDBMS).

2. **What is SQL**

   SQL stands for Structured Query Language

   SQL is a standard language for storing, manipulating and retrieving data in databases. SQL allows you to access and manipulate the databases. To use SQL in: MySQL, SQL Server, MS Access, Oracle, Sybase, Informix, Postgres, and other database systems.

3. **Write SQL Commands**

   **Data Definition Language(DDL)** – Consists of commands which are used to define the database.

   **Data Manipulation Language(DML)** – Consists of commands which are used to manipulate the data present in the database.

   **Data Control Language(DCL)** – Consists of commands which deal with the user permissions and controls of the database system.

   **Transaction Control Language(TCL)** – Consist of commands which deal with the transaction of the database.

4. **What is join?**

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

   The join keyword merges two or more tables and creates a temporary image of the merged table. Then according to the conditions provided, it extracts the required data from the image table, and once data is fetched, the temporary image of the merged tables is dumped.

5. **Write type of joins.**

   (**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.

6. **How Many constraint and describes it self**

   **NOT NULL Constraint** - By default, a column can hold NULL values.
   The NOT NULL constraint enforces a column to NOT accept NULL values.
   This enforces a field to always contain a value, which means that you cannot insert a new record, or update a record without adding a value to this field.
   **UNIQUE Constraint** - The UNIQUE constraint ensures that all values in a column are different.

Both the UNIQUE and PRIMARY KEY constraints provide a guarantee for uniqueness for a column or set of columns.

**DEFAULT Constraint** - The DEFAULT constraint is used to set a default value for a column.

The default value will be added to all new records, if no other value is specified.

**CHECK Constraint** - The CHECK constraint is used to limit the value range that can be placed in a column.

If you define a CHECK constraint on a column it will allow only certain values for this column.

If you define a CHECK constraint on a table it can limit the values in certain columns based on values in other columns in the row.

**PRIMARY KEY Constraint -** The PRIMARY KEY constraint uniquely identifies each record in a table.

Primary keys must contain UNIQUE values, and cannot contain NULL values.

A table can have only ONE primary key; and in the table, this primary key can consist of single or multiple columns (fields).

**FOREIGN KEY Constraint** - The FOREIGN KEY constraint is used to prevent actions that would destroy links between tables.

A FOREIGN KEY is a field (or collection of fields) in one table, that refers to the PRIMARY KEY in another table.

The table with the foreign key is called the child table, and the table with the primary key is called the referenced or parent table.

**7. Difference between RDBMS vs DBMS**

| RDBMS | DBMS |
|---|---|
| Data stored is in table format | Data stored is in the file format |
| Multiple data elements are accessible together | Individual access of data elements |
| Data in the form of a table are linked together | No connection between data |
| Support distributed database | No support for distributed database |
| Data is stored in a large amount | Data stored is a small quantity |
| RDBMS supports multiple users | DBMS supports a single user |
| The software and hardware requirements are higher | The software and hardware requirements are low |
| Example: Oracle, SQL Server. | Example: XML, Microsoft Access. |

**8. What is API Testing**

API testing is a type of software testing that analyzes an application program interface (API) to verify that it fulfills its expected functionality, security, performance and reliability. The tests are performed either directly on the API or as part of integration testing.

**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**

    Full form of .ipa is iOS App Store Package and .apk is Android Package Kit

13. **How to create step for to open the developer option mode ON? To check**

    **Step 1:** Go to *Settings* > *About phone*.

    **Step 2:** Scroll down to *Build number*.

    **Step 3:** Tap *Build number* seven times. After the first few taps, you should see the steps counting down until you unlock the developer options. You may also have to tap in your PIN for verification.

    **Step 4:** Once developer options are activated, you will see a message that reads, *You are now a developer*.

    **Step 5:** Go back to the *Settings* pane and head to *System*, where you will now find *Developer options* as an entry.

    **Step 6:** Tap it and toggle the switch on if it is not already, and from there, you can proceed to make adjustments to your phone.