**TESTING ON LIVE APPLICATION**

**Q.1 What is RDBMS.**

**ANS:** RDBMS stands for Relational DataBase Management System.

RDBMS is a program used to create, update, and manage relational databases. Some of the most well-known RDBMS include MySQL, PostgreSQL, MariaDB, Microsoft SQL Server, and Oracle Database.

It is called relational because tables are related based on common fields.

Most of today’s are relational like;

Database contains one or more tables and one table contains one or more records.

Record contains one or more fields and fields contains the data.

**Q.2 What is SQL.**

**ANS:** SQL stands for Structure Query Language.

SQL is language of database. It includes database creation, delete, update and etc.

SQL is used to communicate with a database. it is the standard language for Relational Database Management Systems.

SQL is standard computer language for accessing and manipulating database.

SQL is Structured Query Language, which is a computer language for storing, manipulating and retrieving data stored in relational database.

**Q.3 Write SQL commands.**

**ANS:** SQL commands are the instructions used to communicate with a database to perform tasks, functions, and queries with data.

**DDL: Data Definition Language**,

It can create, alter, drop, truncate table.

To create table: create table table\_name;

To drop table: drop table table\_name;

To alter table: alter table table\_name(add/drop/modify) column name(data type);

To truncate: truncate table table\_name;

**DML: Data Manipulation Language,**

It can manipulate data in database with syntax queries like Insert, Update, Delete.

To Insert data: Insert into table\_name (colomn1, colomn2…,colomnN) values(value1, value2..,valueN);

To Update data: update table\_name set (colomn1=value1, colomn2=value2..,colomnN=valueN) (where condition);

To delete data: delete from table\_name (where condition);

**DQL: Data Query Language**

DQL is used to fetch the data from the database.

It uses only one command: Select

1: select column1, column2....columnN from table\_name;

2: select distinct column1, column2....columnN from table\_name;

3: select column1, column2....columnN from table\_name where condition;

4: select column1, column2....columnN from table\_name where condition-1 {AND|OR} condition-2;

5: select column1, column2....columnN from table\_name where column\_name IN (val-1, val-2,...val-N);

6: SELECT column1, column2....columnN FROM table\_name WHERE column\_name BETWEEN val-1 AND val-2;

7: SELECT column1, column2....columnN FROM table\_name WHERE column\_name LIKE { PATTERN };

**DCL: Data Control Language**

DCL commands are used to grant and take back authority from any database user.

Grant :  It is used to give user access privileges to a database.

grant privilege\_name on object\_name to User\_name;

Revoke: It is used to revoke given permissions from user.

Revoke privilege\_name on object\_name to User\_name;

**Q.4 What is JOIN?**

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

There are four types of JOINS,

* Inner join
* Left join
* Right join
* Full join

**Q.5 Write types of JOINS.**

**ANS:** There are four types of JOINS,

* **Inner join** : The most frequently used and important of the joins is the INNER JOIN. They are also referred to as an EquiJoin. It shows records that have matching values in both tables.

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

* **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 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

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

* **Right join**: The SQL RIGHT JOIN returns all rows from the right table, even if there are no matches in the left table.

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

* **Full join:** The SQL FULL JOIN combines the results of both left and right outer joins.

The joined table will contain all records from both tables, and fill in NULLs for missing matches on either side.

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

**Q.6** How Many constraints and describes it self

Ans: Constraints are used to limit the type of data that can go into a table. SQL constraints are used to specify rules for the data in 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.

There are mainly 4 constraints used in SQL,

* Primary key: A combination of a Not null and unique. Uniquely identifies each row in a table
* Unique key:  Ensures that all values in a column are different
* Foreign key: Prevents actions that would destroy links between tables
* Not Null: Ensures that a column cannot have a null value.

**Q.7** Difference between RDBMS vs DBMS.

Ans:

**RDBMS :**

* RDBMS applications store **data in a tabular form**
* In RDBMS, the tables have an identifier called primary key and the data values are stored in the form of tables.
* Multiple data elements can be accessed at the same time.
* Data is stored in the form of tables which are related to each other.
* Normalization is present.
* It uses a tabular structure where the headers are the column names, and the rows contain corresponding values.
* It deals with large amount of data.
* It is used to handle large amount of data
* in RDBMS, data values are stored in the form of tables, so a **relationship**between these data values will be stored in the form of a table as well.
* Example of RDBMS are **mysql, postgre, sql server, oracle** etc.

**DBMS:**

* DBMS applications store **data as file**.
* In DBMS, data is generally stored in either a hierarchical form or a navigational form
* Data elements need to access individually.
* No relationship between data.
* Normalization is not present.
* DBMS does not support distributed database.
* DBMS uses file system to store data, so there will be **no relation between the tables.**
* It deals with small quantity of data.
* It is used for small organization and deal with small data.
* Examples:[XML](https://www.geeksforgeeks.org/xml-basics/), Window Registry, Forxpro, dbaseIIIplus etc.

**Q.8** What is API testing?

Ans: API stands for Application Programming Interface.

It is a software interface that allows two applications to interact with each other without any user intervention.

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.

This type of testing is typically performed at the integration level, after unit testing is completed, and before user interface testing begins.

API act as a bridge between different software systems, allowing them to communicate and exchange data with each other.

**Q.9** Types of API testing.

Ans: There are mainly three types of API testing,

1: Open API:

These types of API are publicly available to use from Google. It has also not given any restriction to use them. So they are also known as Public API. It can be used by anyone because it has open source.

2: Partner API:

It has private source so not anybody can use this.

Specific rights or licenses to access this type of API because they are not available to the public.

3: Internal or Private API:

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.

It can be used by only that belonging team members.

**Q.10** What is Responsive Testing?

Ans: Responsive testing means it is the process of testing how a website or application responds to different screen sizes and resolutions.

Responsive testing means how a website or web application looks and behaves on different devices, screen sizes, and resolutions. The goal of responsive testing is to ensure that the website or web application can be used effectively on various devices, including desktops, laptops, tablets, and smartphones.

**Q.11** Which types of tools are available for Responsive Testing?

Ans: There are different tools available in market but these are mainly used tools,

1: Lambda test/LT browser

2: Am I responsive

3: Cross browser testing

4: BrowserStack

5: SauceLab

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

Ans:

1: APK stands for Android Application Package.

APK is a file extension of an Android device. APK files can normally be used in Android and other Android based **Operating Systems** for the distribution and installation of mobile apps and mobile games.

2: IPA is iOS App Store Package.

file is an iOS application archive file that stores an iOS app. Each IPA file includes a binary and can only be installed on an iOS device.

An IPA is an application archive file that contains an iOS app. it is a file that can be installed on iOS devices and used as an application.

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

Ans: To open the developer mode on we need to follow these steps,

1-Open setting in phone

2-open about phone

3-Software information

4-Build number

5- tap on build number six seven times

After following these steps the developer mode will turn on.