

**Name :- pavan gulambe**

**Department :- software  
testing**

**Assignment topic:- module- 3  
(testing on  
live application)**

**Submitted To:- tanvi meer**

#### **1 . what is RDBMS**

**Relational Database Management System (RDBMS) is an advanced version of a DBMS system. It came into existence during 1970's. RDBMS system also allows the organization to access data more efficiently then DBMS.**

**RDBMS is a software system which is used to store only data which need to be stored in the form of tables. In this kind of system, data is managed and stored in rows and columns which is known as tuples and attributes.**

**RDBMS is a powerful data management system and is widely used across the world**

#### **2 . WHAT IS SQL**

**SQL stands for "Structured Query language"**

**SQL is the standard language for dealing with Relational Databases. SQL can be used to insert, search, update, and delete database records. SQL can do lots of other operations, including optimizing and maintenance of databases.**

**Here are important reasons for using**

**SQL :- • It helps users to access data in the RDBMS system.**

- It helps you to describe the data.**
- It allows you to define the data in a database and manipulate that specific data.**
- With the help of SQL, you can create and drop databases and tables**
- SQL offers you to use the function in a database, create a view, and stored procedure.**
- You can set permissions on tables, procedures, and views.**

### **3 . WRITE SQL COMMANDS**

**ANS- SQL COMMANDS :-**

**DDL -DATA DEFINATION LANGUAGE**

**DML- DATA MANIPULATION LANGUAGE**

**DCL- DATA CONTROL LANGUAGE**

**DQL- DATA QUERY LANGUAGE**

**DDL - DATA DEFINATION LANGUAGE**

**Command    description**

<b>Create</b>	<b>creates a new table , a view of a table , or other object in database</b>
---------------	--

<b>Alter</b>	<b>modifies an existing database object , such as a table</b>
--------------	---

<b>Drop</b>	<b>deletes an entire table , view of a table or other object in the database in the database,</b>
-------------	---

**DML- data manipulation language**

**command    description**

<b>Insert</b>	<b>creates a</b>
<b>records</b>	<b>Update</b>

**modifies record**

<b>Delete</b>	<b>deletes records</b>
---------------	------------------------

**DCL - DATA CONTROL LANGUAGE**

**Command    description**

<b>Grant</b>	<b>gives a privilege to user</b>
--------------	----------------------------------

<b>Revoke</b>	<b>takes back privileges a granted from users</b>
---------------	---

**DQL- DATA QUERY LANGUAGE**

**Command    description**

**Select                      retrieves certain records from one more table**

#### **4 . WHAT IS JOINS**

**Introduction:- SQL joins are used to fetch or retrieve data from two or more data tables, based on a join condition. A join condition is a relationship among some columns in the data tables that take part in Sql join. Basically data tables are related to each other with keys. We use these keys relationship in Sql joins. A primary key is a column or a combination of columns with a unique value for each row. Each primary key value must be unique within the table. The purpose is to bind data together, across tables, without repeating all of the data in every table.**

#### **5 . WRITE TYPE OF JOIN**

**Types of Joins: There are different types of join, they are**

**...**

**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.

#### **INNER JOIN:**

The most frequently used and important of the joins is the **INNER JOIN**. They are also referred to as an **EQUI JOIN**.

The **INNER JOIN** creates a new result table by combining column values of two tables (table1 and table2) based upon the join predicate. The query compares each row of table1 with each row of table2 to find all pairs of rows which satisfy the join-predicate. When the join-predicate is satisfied, column values for each matched pair of rows of A and B are combined into a result row. The **INNER JOIN** in SQL joins two tables according to the matching of a certain criteria using a comparison operator.

#### **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 if the ON clause matches 0 (zero) records in right table, the join will still return a row in the result, but with NULL in each column from 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.**

#### **RIGHT JOIN:**

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

**This means that if the ON clause matches 0 (zero) records in left table, the join will still return a row in the result. But with NULL in each column from left table. This means that a right join returns all the values from the right table, plus matched values from the left table or NULL in case of no matching join predicate.**

#### **FULL JOIN:**

**In SQL the FULL OUTER JOIN combines the results of both left and right outer joins and returns all matched or unmatched rows from the tables on both sides of the join clause.**

## **6 . HOW MANY CONSTRAINT AND DESCRIBES IT SELF**

### **1. not null constraints**

**Not NULL constraints prevent null values from being entered into a column.**

### **2. 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**

### **3. Primary key constraints**

**You can use primary key and foreign key constraints to define relationship between**

**Table.**

### **4. Check constraints**

**A check constraint specifies the value allowed in one or more columns of every row of Table. Specifying check constraints is done through a restricted form of a search**

**Condition.**

### **5. Foreign key constraints**

**Foreign key constraints ( also know as referential constraints or referential integrity constraints)**

**Enable definition of required relationships between and within tables.**

## **6. Informational constraints**

**An informational constraint is a constraint attributes that can be used by 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. DIFFERENT BETWEEN RDBMS VS DBMS**

**DBMS**

**RDBMS**

**=>DBMS stores data as files.  
stores data in tabular forms.**

**=>Data elements needs to access individual  
elements can be accessed**

**same time**

**=> no relationship between data.  
in the form of tables which**

**=> RDBMS**

**=>multiple data**

**At The**

**=> data is stored**



**Are**

**related to each other => normalization is not present.**

**=> normalization is present.**

**=>DBMS does not support distributed  
supports distributes database.**

**=>RDBMS**

**Database**

**=>it stores data in either a navigations  
tabular structure where the**

**=>it uses a**

**Or hierarchical form.  
are the column names, and the**

**Headers**

**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  
handel large amount of**

**=>it is used to**

**Small data**

**data**

**=> it support singel user.  
multiple users.**

**=> it support**

**=> data fetching is slower for the large amount  
fast because of relational**

**=>data fetching is**

**Of data**

**approach**

**=>the data in a DBMS is subject to low security  
multiple levels of data security**

**=>there exits**

**Level with regards to data manipulation**

**in a RDBMS**

**=>low software and hardware necessities.  
software and hardware necessities.**

**=>higher**

**=>examples: XML,window registry ets.  
MySQL, postgresSQL,SQL server,**

**=>example:**

**Oracle , microsoft access etc.**

## **8 . WHAT IS API TESTING**

**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.**

### **API Testing image**

**For background, API (Application Programming Interface) is a computing interface that enables communication and data exchange between two separate software systems. A software system that executes an API includes several functions/subroutines that another software system can perform. API defines requests that can be made, how to make requests, data formats that can be used, etc., between two software systems.**

## **9 . TYPES OF API TESTING**

- 1. openAPIs**
- 2. Partner APIs**
- 3. Internal APIs**

## **10 . WHAT IS RESPONSIVE TESTING**

**Responsive testing is a process that 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 resolution**

## **11 . WHICH TYPES OF TOOLS ARE AVAILABLE FOR RESPONSIVE TESTING**

- 1. LT BROWSER**
- 2. LAMBDA TESTING**
- 3. GOOGLERESIZER**
- 4. IAMRESPONSIVE**
- 5. PIXELTUNER**

## **12 . WHAT IS THE FULL FORM OF . IPA, APK**

**.ipa international phonetic alphabet**

**.apk: android package kit**

## **13 HOW TO CREATE STEP FOR TO OPEN THE DEVELOPERS OPTION MODE ON**

- 1. Setting**
- 2. Additional setting**
- 3. Developer option**
- 4. Enter code**
- 5. Use**

## 6. Developer option on