

Software Testing Assignment-4

Module-4(ST – Defect Management)

(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).

The RDBMS provides an interface between users and applications and the database, as well as administrative functions for managing data storage, access, and performance.

(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 ?

These SQL commands are mainly type into five categories:

- (1) DDL - Data Definition Language
- (2) DQL - Data Query Language
- (3) DML - Data Manipulation Language
- (4) DCL-Data Control Language
- (5) TCL - Transaction Control Language

(4) What is join?

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

(5) Write type of joins.

There are four types of Joins in sql

- (1) INNER JOIN
- (2) LEFT JOIN
- (3) RIGHT JOIN
- (4) FULL JOIN

(6) How Many constraint and describes it self ?

There are seven constraint in sql :

(1) NOT NULL :-

- By default, a column can hold NULL values.
- The NOT NULL constraint enforces a column to NOT accept NULL values.

(2) UNIQUE :-

- 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.

(3) PRIMARY KEY :-

- The PRIMARY KEY constraint uniquely identifies each record in a table.
- Primary keys must contain UNIQUE values, and cannot NULL values contain.

(4) FOREIGN KEY :-

- The FOREIGN KEY constraint is used to prevent actions that would destroy links between tables.
- A FOREIGN KEY is a field in one table, that refers to the PRIMARY KEY in another table.

(5) CHECK :-

- 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.

(6) DEFAULT :-

- 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.

(7) CREATE INDEX :-

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

(7) What is an SQL alias ?

- SQL aliases are used to give a table, or a column in a table, a temporary name.
- Aliases are often used to make column names more readable.
- An alias only exists for the duration of that query.
- An alias is created with the AS keyword.

(8) Difference between RDBMS vs DBMS

Sr no	RDBMS	Sr no	DBMS
1	Data stored is in table format	1	Data stored is in the file format
2	Multiple data elements are accessible together	2	Individual access of data elements
3	Data in the form of a table are linked together	3	No connection between data
4	Support distributed database	4	No support for distributed database
5	Data is stored in a large amount	5	Data stored is a small quantity
6	RDBMS supports multiple users	6	DBMS supports a single user

(9) Write a query to create the table in Structured Query Language.

```
➤ create table Student  
(  
    id int,  
    sname varchar(30),  
    course text,  
    cost int(10)  
);
```

(10) Write a query to insert data into table.

- insert into student VALUES(101, 'manshi','python', 33000);

(11) Write a query to update data into table with validations.

- Update emp1 set salary=32000;
update emp2 set salary=32000 where eid=3;

(12) Write a query to delete data from table with Validations.

- delete from emp1;
delete from emp2 where dept='Purchase';

(13) Write a query to insert new column in existing table.

- alter table emp_new add COLUMN city text;

(14) Write a query to drop table and database.

- Drop table test employee;

(15) Write a query to find max and min value from table.

- select max(salary) as "Maximum Salary Is" FROM employee;
- select MIN(salary) as "Minumum Salary Is" FROM employee;

(16) Create two tables named Seller and Product apply foreign key in product table Fetch data from both table using different joins.

```
➤ CREATE TABLE Department
(
    Did int PRIMARY KEY,
    Dname text,
    branch text,
    city text
);
```

-> insert a department records

```
-----
INSERT into department
VALUES(1,'purchase','aaaa','porbandar');
INSERT into department VALUES(2,'sales','bbbb','rajkot');
INSERT into department VALUES(3,'legal','ccc','ahmedabad');
```

```
➤ CREATE TABLE employee1
(
    e1id int,
    e1name text,
    Salary int,
    did int,
    PRIMARY KEY(e1id),
    FOREIGN KEY(did) REFERENCES department (did)
);
```

-> insert employee1 entry

```
INSERT into employee1 VALUES(101,'bhavna',40000,1);  
INSERT into employee1 VALUES(102,'manshi',23000,2);  
INSERT into employee1 VALUES(103,'meshva',34000,3);  
INSERT into employee1 VALUES(104,'bhavya',30000,1);
```

(17) What is API Testing

- API is the mediator which helps to applications to communicate with each other. It is kind of logic written by developers using any programming language to perform something.

Testing the business logic of any application is called API. QA will test the same logic and called API testing.

(18) Types of API Testing

- Mainly 3 types of API Testing

(1) 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.

(2) Partner APIs:

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

(3) 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.

(19) What is Responsive Testing?

- Responsive testing involves 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.

(20) Which types of tools are available for Responsive Testing

- Fives types of Responsive Testing Tools

- (1) LT Browser
- (2) Lambda Testing
- (3) Google Resizer
- (4) am I responsive
- (5) Pixel tuner

(21) What is the full form of .ipa, .apk

➤ .ipa :-

IPA in English means the International Phonetic Alphabet.

.apk :-

The full form of APK is an Android Application Package. APK is the application file type used in the Android operating system.

(22) How to create step for to open the developer option mode ON?

➤ **Step 1:** Go to *Settings > my Phone*.

- **Step 2:** Tap *Software Info > 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, where you will now find *Developer* options as an entry.

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

