**What is load testing?**

* Load testing is non-functional software testing process in which the performance of software application is tested under a specific expected load.

**What is stress Testing?**

* Stress testing is non-functional software testing process. Which checkthe behaviour of an application by applying load.

**Mention what are the categories of defects?**

* Functional defect
* Performance defect
* Usability defect
* Security defect

**Explain types of Performance testing**

* Load testing -simulates a real-world load on the system to see how it performs under stress
* Stress testing -is a type of load testing that tests the system's ability to handle a high load above normal usage levels
* Spike testing-is a type of load testing that tests the system's ability to handle sudden spikes in traffic.
* Soak testing- is a type of load testing that tests the system's ability to handle a sustained load over a prolonged period.
* Endurance testing - is similar to soak testing, but it focuses on the long-term behavior of the system under a constant load.
* Volume testing-a large number of data is saved in a database and the overall software system's behavior is observed.
* Scalibality testing-the software application's effectiveness is determined by scaling up to support an increase in user load.

**What is priority?**

* How soon we need to fix the bug /defect called priority.

**What is severity?**

* How much bug/defect impacting the functional behaviour of application called severity.

**Bug categories are…**

* Functional bug
* Performance bug
* Compatibility bug
* Regression bug
* Security bug
* Data bug
* Integration bug

**Advantage of Bugzila**

* It is an open-source bug tracking system
* It is easy in usage and its user interface is understandable for people without technical knowledge
* It easily integrates with test management
* It integrates with an emails system

**What is RDBMS**

**A Relational Database Management System (RDBMS) is a software application that manages relational databases. It provides tools to create, update, query, and retrieve data stored in a relational format, typically organized into tables with rows and columns. RDBMS software acts as an interface between users, applications, and the database, ensuring data consistency, security, and access control.**

**What is SQL**

* SQL stands for Structured Query Language
* SQL lets you access and manipulate databases

Write SQL Commands

* DDL
*  CREATE: Creates new tables, views, or other database objects.
*  ALTER: Modifies existing database objects.
*  DROP: Deletes database objects.
* DQL
* SELECT: Fetches data from one or more tables.
* DML
*  INSERT: Adds new records to a table.
*  UPDATE: Modifies existing records.
*  DELETE: Removes records from a table

**What is join?**

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

**Write type of joins**.

* Inner join
* Left join
* Right join

**How Many constraint and describes it self**

* **Primary key** **-** A **PRIMARY KEY** constraint is a combination of the **NOT NULL** and **UNIQUE** constraints.
* **Unique key -** The **UNIQUE** constraint ensures that all values in a column are distinct across all rows in a table.
* **Foreign key –** referencing

**Not null** – The NOT NULL constraint ensures that a column cannot contain NULL values.

* **Default – The DEFAULT constraint provides a default value for a column when no value is specified during insertion.**
* **Check –** Validates values based on a condition

**Difference between RDBMS vs DBMS**

|  |  |
| --- | --- |
| **RDBMS** | **DBMS** |
| RDBMS stand for Relational Database Management System | DBMS stand for Database Management System |
| It is store data in a table form | It is store data as file |
| RDBMS supports Distributed database | DBMS dose not supports Distributed database |
| Data stored in a large amount | Data stored in a small amount |
| Data is stored in the form of tables which are related to each other. | No relationship between data |

**What is API Testing**

* API Testing is a software testing type that Validates Application Programming Interfaces.
* The purpose is to check the functionality, reliability, performance and security of the programming interfaces.

**Types of API Testing**

* Functional testing
* Security testing
* Performance testing
* Load testing
* Integration testing

**What is Responsive Testing?**

* Responsive testing involves how a website or web application looks and behaves on different devices, screen sizes, and resolutions.

**Which types of tools are available for Responsive Testing**

* LT Browser
* Lembda Testing
* Google Resize
* I am Responsive
* Pixel Tuner

**What is the full form of .ipa, .apk**

* .ipa – IOS App Store Package
* .apk – Android Package Kit

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

* Open Setting 🡪About Phone 🡪Build Number 🡪Tap the Build Number “7 Time”

**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.

**Write a query to create the table in Structured Query Language.**

* CREATE TABLE table\_name

(

column1 datatype constraints,

column2 datatype constraints,

...

columnN datatype constraints);

**Write a query to insert data into table.**

* INSERT INTO table\_name (column1, column2, column3, ...)  
  VALUES (value1, value2, value3, ...);

**Write a query to update data into table with validations.**

* create trigger Patrol\_NoOverlap\_AIU on Patrol for insert, update as

begin

if exists (select \*

from inserted i

inner join Patrol p

on i.GuardId = p.GuardId

and i.PatrolId <> p.PatrolId

where (i.Starts between p.starts and p.Ends)

or (i.Ends between p.Starts and p.Ends))

rollback transaction

end

**Write a query to delete data from table with validations.**

* Create the database Company

CREATE DATABASE Company;

USE Company;

DROP TABLE IF EXISTS orders;

DROP TABLE IF EXISTS customers;

DROP TABLE IF EXISTS employees;

DROP TABLE IF EXISTS departments;

**Write a query to insert new column in existing table.**

1. table\_name: The name of the table you want to modify.
2. new\_column\_name: The name of the new column you wish to add.
3. data\_type: The data type for the new column, such as INT , VARCHAR , etc.
4. column\_options: Optional constraints like NOT NULL , DEFAULT , etc.

**Write a query to drop table and database**

* DROP TABLE table\_name;

**Write a query to find max and min value from table.**

* SELECT  
   MIN(column\_name) AS min\_value,  
   MAX(column\_name) AS max\_value  
  FROM  
   table\_name;

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

* + Seller Table  
    CREATE TABLE Seller (  
     seller\_id INT PRIMARY KEY,  
     seller\_name VARCHAR(255),  
     location VARCHAR(255)  
    );  
      
    -- Product Table  
    CREATE TABLE Product (  
     product\_id INT PRIMARY KEY,  
     product\_name VARCHAR(255),  
     price DECIMAL(10, 2),  
     seller\_id INT,  
     FOREIGN KEY (seller\_id) REFERENCES Seller(seller\_id)  
    );