1. What is RDBMS?

Ans: RDBMS stands for Relational Database Management System.

A Relational database management system (RDBMS) is a database management system (DBMS) that is based on the relational model as introduced by E. F. Codd.

2. What is SQL?

Ans: SQL is a language of database, it includes database creation, deletion, fetching rows and modifying rows etc.

SQL is a standard computer language for accessing and manipulating databases.

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

SQL is the standard language for Relation Database System. All relational database management systems like MySQL, MS Access, Oracle , Sybase, Informix, postgres and SQL Server use SQL as standard database language.

3. Write SQL Commands

Ans:

SQL Commands

- DDL – Data Definition Language

Command	Description
CREATE	Creates a new table, a view of a table, or other object in database
ALTER	Modifies an existing database object, such as a table.
DROP	Deletes an entire table, a view of a table or other object in the database.

- DML – Data Manipulation Language

Command	Description
INSERT	Creates a record
UPDATE	Modifies records
DELETE	Deletes records

- DCL – Data Control Language

Command	Description
GRANT	Gives a privilege to user
REVOKE	Takes back privileges granted from user

- DQL – Data Query Language

Command	Description
SELECT	Retrieves certain records from one or more tables

4. What is JOIN?

Ans: JOIN is used to combine & get the data from different tables.

5. Write type of joins.

Ans:

(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 JOIN: Returns rows when there is a match in one of the tables.

6. How Many constraint and describes it self

Ans:

- Primary key constraint: is a column or combination of columns that has the same properties as a unique constraint. You can use a primary key and foreign key constraints to define relationships between tables.

- Foreign key: is a logical rule about values in one or more columns in one or more tables. For example, a set of tables shares information about a corporation's suppliers. Occasionally, a supplier's name changes.

- Unique key: is a rule that forbids duplicate values in one or more columns within a table. Unique and primary keys are the supported unique constraints.

- Not null key: is a rule that prevents null values from being entered into one or more columns within a table.

7. Difference between RDBMS vs DBMS

Ans:

	DBMS	RDBMS
1.	DBMS applications store **data as file**.	RDBMS applications store **data in a tabular form**.
2.	In DBMS, data is generally stored in either a hierarchical form or a navigational form.	In RDBMS, the tables have an identifier called primary key and the data values are stored in the form of tables.
3.	**Normalization is not** present in DBMS.	**Normalization is** present in RDBMS.
4.	DBMS does **not apply any security** with regards to data manipulation.	RDBMS **defines the integrity constraint** for the purpose of ACID (Atomicity, Consistency, Isolation and Durability) property.
5.	DBMS uses file system to store data, so there will be **no relation between the tables**.	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.
6.	DBMS has to provide some uniform methods to access the stored information.	RDBMS system supports a tabular structure of the data and a relationship between them to access the stored information.
7.	DBMS **does not support distributed database**.	RDBMS **supports distributed database**.
8.	DBMS is meant to be for small organization and **deal with small data**. it supports **single user**.	RDBMS is designed to **handle large amount of data**. it supports **multiple users**.
9.	Data Redundancy is common in this model leading to difficulty in maintaining the data.	Keys and indexes are used in the tables to avoid redundancy.
10.	Example DBMS are dBase, Microsoft Access, LibreOffice Base, FoxPro.	Example RDBMS are SQL Server, Oracle , MySQL, Maria DB, SQLite.

8. What is API Testing

Ans: Application Programming Interface (API) is a software interface that allows two applications to interact with each other without any user intervention.

API (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

There are mainly 3 types of API Testing

- Open APIs
- Partner APIs
- Internal APIs:

Tools for API Testing

- PostMan
- SoapUI
- Jmeter
- VRes

9. Types of API Testing

Ans: 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?

Ans: Responsive testing is a process that renders 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 resolutions.

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.

11. Which types of tools are available for Responsive Testing

Ans: Responsive Testing Tools

- LT Browser
- Lembda Testing
- Google Resizer
- I am responsive
- Pixel tuner

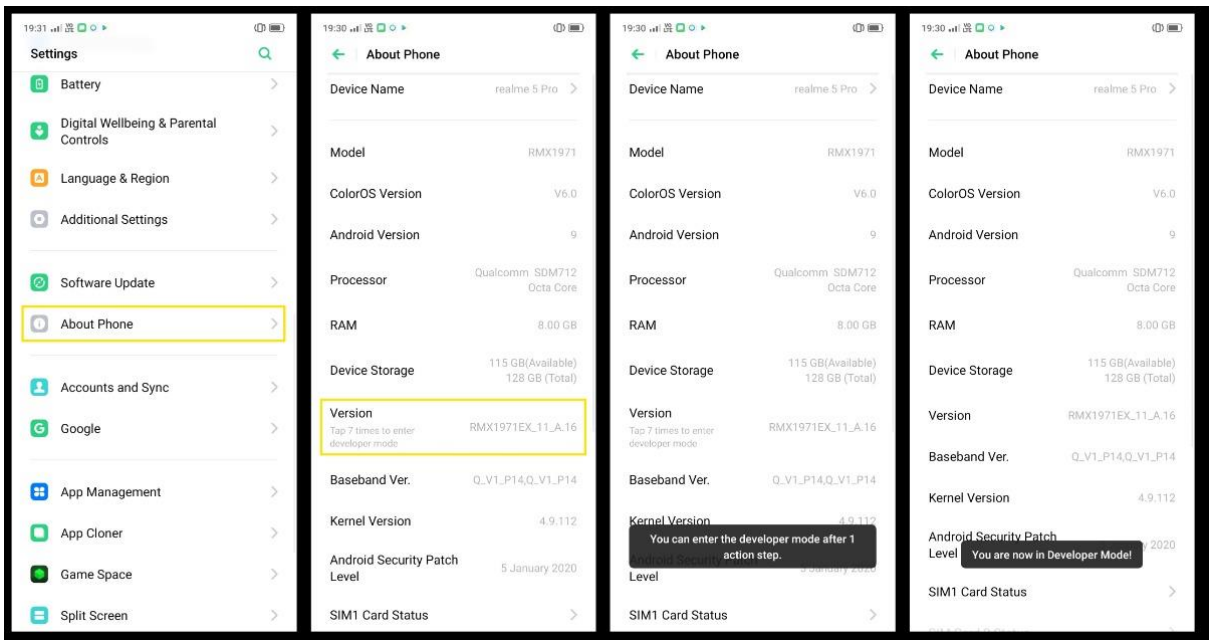
12. What is the full form of .ipa and .apk

Ans

iPA: iOS APP Store Package.
APK: Android Application Package file

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

Ans:



14. Which components have you used in Load Runner?

Ans: **The key components of Load Runner are:**

- Load Generator generates the load against the application by following scripts.
- VuGen (Virtual User Generator) for generating and editing scripts.
- Controller controls, launches and sequences instances of Load Generator - specifying which script to use, for how long etc.

15. How can you set the number of Vusers in Load Runner?

Ans: You can set the number of Vusers in the controller section while creating your scenarios. Many other advanced options like ramp-up, ramp-down of Vusers are also available in the Controller section

16. What is Correlation?

Ans: Correlation is a statistical measure that indicates the extent to which two or more variables fluctuate in relation to each other

17. What is the process for developing a Vuser Script?

Ans:

There are 5 steps for developing a vuser script.

1. Recording the vuser script.
2. Edit the vuser script.
3. Runtime setting.
4. Run the vuser script in stand-alone mode.
5. Incorporate the vuser script into a load runner scenario.

18. How Load Runner interacts with the application?

Ans: Load Runner simulates user activity by **generating messages between application components or by simulating interactions with the user interface such as key presses or mouse movements**. The messages and interactions to be generated are stored in scripts.

19. How many VUsers are required for load testing?

Ans: if you run a load test with **10,000 virtual users**, each making a request every 20 seconds (3 requests per minute), then you're making 30,000 requests per minute, which equals 500 requests per second.

20. What is the relationship between Response Time and Throughput?

Ans: Response time and throughput are related. The response time for an average transaction tends to decrease as you increase overall throughput. However, you can decrease the response time for a specific query, at the expense of overall throughput, by allocating a disproportionate amount of resources to that query.

21. What is the difference between hits/second and requests/second?

Ans: Hits per second means the number of hits the server receives in one second from the vuser. Request per second is the number of request the vuser will request from the server.