ASSIGNMENT MODULE 3

1. What is RDBMS?

RDBMS (Relational Database Management System) is a software that stores and manages data in tables (rows and columns), allowing relationships between data to be established using primary and foreign keys.

2. What is SQL?

SQL (Structured Query Language) is a standard language used to store, manage, and retrieve data from a relational database.

It is used for operations like inserting, updating, deleting, and querying data.

3. Write SQL Commands

CREATE – Creates a new table or database.

CREATE TABLE Students (ID INT, Name VARCHAR (50), Age INT);

INSERT – Adds new data into a table.

INSERT INTO Students VALUES (1, 'Amit', 22);

SELECT – Retrieves data from a table.

SELECT * FROM Students;

UPDATE – Modifies existing data in a table.

UPDATE Students SET Age = 23 WHERE ID = 1;

DELETE – Removes data from a table.

DELETE FROM Students WHERE ID = 1;

DROP – Deletes a table or database.

DROP TABLE Students;

4. What is join?

A JOIN in SQL is used to combine data from two or more tables based on a related column (usually a key).

5. Write type of joins.

- INNER JOIN Returns only the records that have matching values in both tables.
- LEFT JOIN (LEFT OUTER JOIN) Returns all records from the left table and the matching ones from the right table.
- **RIGHT JOIN (RIGHT OUTER JOIN)** Returns all records from the right table and the matching ones from the left table.
- **FULL JOIN** (**FULL OUTER JOIN**) Returns all records when there is a match in either table.
- **CROSS JOIN** Returns all possible combinations of rows from both tables (Cartesian product).

6. How Many constraints and describe it self

- 1. **NOT NULL** Ensures a column cannot have NULL values.
- 2. UNIQUE Ensures all values in a column are unique.
- **3. PRIMARY KEY** Uniquely identifies each record (NOT NULL + UNIQUE).
- 4. **FOREIGN KEY** Links two tables and maintains data relationship.
- **5. CHECK** Ensures values meet a specific condition.
- **6. DEFAULT** Sets a default value if none is provided.

7. Difference between RDBMS vs DBMS

Feature	DBMS	RDBMS
Full Form	Database Management System	Relational Database Management System
Data Storage	Stores data in files	Stores data in tables (rows & columns)
Relationship	No relation between data	Maintains relationships using keys
Normalization	Not supported	Supported
Examples	Microsoft Access, dBase	MySQL, Oracle, SQL Server

8. What is API Testing?

API Testing is a type of software testing that checks whether Application Programming Interfaces (APIs) work correctly.

9. Types of API Testing

Open API (Public API) - Available for everyone to use — no special permission needed. Example: Google Maps API.

Partner API - Shared with specific business partners — requires authorization or an agreement.

Internal API (Private API) - Used only within an organization — not exposed to external users.

Composite API- Combines multiple APIs into one — helps get data from different sources in a single call.

10. What is Responsive Testing?

Responsive Testing is a type of testing that checks whether a website or application adjusts and works correctly on different devices, screen sizes, and resolutions.

11. Which types of tools are available for Responsive Testing

- Browser Developer Tools
- Online Cross-Browser Testing Tools
- Emulators and Simulators
- Automated Testing Tools
- Responsive Design Testing Plugins

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

IPA → iOS App Store Package (used for iOS applications)

APK → Android Package Kit (used for Android applications)

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

Here are the steps to enable Developer Options on an Android device:

- 1. Open Settings on your Android device.
- 2. Scroll down and select About Phone (or About Device).
- 3. Find Build Number.
- 4. Tap Build Number 7 times repeatedly.
- 5. You will see a message: "You are now a developer!"
- 6. Go back to Settings → System → Developer Options (or directly Developer Options in some devices).
- 7. Toggle Developer Options ON.

14.To check

To check if Developer Options are enabled on your Android device:

- 1. Open Settings.
- 2. Scroll down and look for Developer Options (usually under System or Additional Settings).
- 3. Tap Developer Options.
- 4. If the toggle is ON, Developer Mode is enabled.