# Module 4

* **What is RDBMS?**

**Ans:**

RDBMS stands for Relational database Management system. RDBMS is the basis of SQL, and all for modern database like MA SQL server, IBM DB2 Oracle, MySQL, and Microsoft access.

* **What is SQL?**

**ANS:**

SQL stands for Structured Query language and 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.

* **What is SQL commands?**

**Ans:**

There are four categories:

1. **Data Query Language (DQL)**
2. **Data Manipulation Language (DML)**
3. **Data Definition Language (DDL)**
4. **Data control Language (DCL)**

* **What is join?**

**Anns:**

A join in SQL is used to combine rows from two or more tables based on a related column between them.

* **Write type of joins.**

Types of join:

1. **Inner join**: Returns rows when there is a match in both tables

2. **left join**: Return all rows from the left table even if no matches in right table

3. **Right join**: Return all rows from the right table even if no match in the left table

4. **Full join:** Returns rows when there is a one match in both table

* **How Many constraint and describes it self**

**Ans:**

Types of Constraints in Java:

1. Built-in Constraints: Java provides a set of predefined annotations in the javax. validation.constraints package. These include
   * @AssertFalse: Ensures the annotated element is false.​
   * @AssertTrue: Ensures the annotated element is true.​
   * @DecimalMax: Ensures the annotated element is less than or equal to a specified maximum value.​
   * @DecimalMin: Ensures the annotated element is greater than or equal to a specified minimum value.​
   * @Digits: Ensures the annotated element is a number within a specified range.​
   * @Email: Ensures the annotated element is a valid email address.​
   * @Future: Ensures the annotated element is a date in the future.​
   * @NotNull: Ensures the annotated element is not null
   * @Size: Ensures the size of the annotated element is between specified boundaries

|  |  |
| --- | --- |
| **RDBMS** | **DBMS** |

* **Difference between RDBMS vs DBMS**

|  |  |
| --- | --- |
| * Stores data in a file-based system without a specific structure, allowing for flexible data storage. * Does not inherently support relationships between data entities. | * Organizes data into tables with rows and columns, adhering to the relational model. * Establishes relationships between tables using primary and foreign keys, ensuring referential integrity. |

* **What is an SQL alias?**

**Ans:**

in SQL, an alias is a temporary name assigned to a column or table for the duration of a query. Aliases are used to make SQL queries more readable, concise, and easier to understand, especially when dealing with complex expressions or multiple tables.​

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

**Ans:**

Create table\_Employee(

Empid varchar(100)

);

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

**Ans:**

INSERT INTO `Employee` (`Empid`) VALUES ('123456’);

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

**Ans:**

[UPDATE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/update.html) employeetable [SET](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/set.html) first\_name ="john" WHERE employee\_id = "1";

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

**Ans:**

DELETE FROM `employeetable` WHERE employee\_id="1";

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

**Ans:**

ALTER TABLE employeetable ADD address varchar(100**);**

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

**Ans:**

DROP TABLE data;

DROP DATABASE employess;

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

**Ans:**

SELECT MIN(salary) FROM empsalary;

SELECT MAX(salary) FROM empsalary;

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

**Ans:**

CREATE TABLE seller(

empiid varchar(100)

);

CREATE TABLE product(

name varchar(100)

);

* **What is API Testing**

**Ans:**

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.

* **Types of API Testing**

**Ans:**

**There are 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.

* **What is Responsive Testing?**

**Ans:**

Layout adaptability (does the content reflow properly?)

Font sizes and images scaling correctly

Navigation menus working on all devices

Touch elements functioning (on mobile)

Breakpoints triggering expected changes

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

**Ans:**

Tools for responsive testing:

**-**LT Browser

-Lembda Testing

-Google Resizer

-I am responsive

-Pixel tuner

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

.ipa: Stands for iOS App Store Package

.apk: Stands for Android Package Kit.

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

Here's how you can enable Developer Options:​

1. **Open Settings**: Navigate to your device's **Settings** app.​
2. **Access About Phone**: Scroll down and tap on **About phone** or **About device**.​
3. **Locate Build Number**:
   * Find the **Build number** entry. On some devices, you might need to tap on **Software information** first.​
4. **Enable Developer Mode**:
   * Tap on **Build number** **seven times** in quick succession.​
   * After a few taps, you might see a countdown message like "You are now X steps away from being a developer
   * Once you've tapped seven times, a message will appear saying, "You are now a developer!"​
   * If prompted, enter your device's PIN or unlock pattern to confirm.​
5. **Access Developer Options**:
   * Return to the main **Settings** menu
   * Scroll down, and you should now see a new section called **Developer options**.​
   * Tap on **Developer options** to access various settings.