* **Module 4**

1. What is RDBMS?

* RDBMS stands for Relational Database Management System.
* RDBMS is the basis for SQL, and for all modern database systems like MS SQL Server, IBM DB2, Oracle, MySQL, and Microsoft Access.
* 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.

1. What is SQL?

* SQL is stands for structured Query Language.
* SQL is a computer language for storing, manipulating and retrieving data stored in relational databases.

1. Write SQL Commands.

* DQL – Data Query Language (Select)
* DML – Data Manipulation Language (Insert, Update, Delete)
* DCL – Data Control Language (Grant, Revoke)
* DDL – Data Definition Language (Create, Alter, Drop)

1. What is join?

* “A join statement is used to combine data of rows from two or more tables based on a common field between them.”

1. Write type of joins.

* There are four types of joins:

1) INNER JOIN: returns rows when there is a match in both tables.

2) LEFT JOIN: returns all rows from the left table, even if there are no matches in the right table.

3) RIGHT JOIN: returns all rows from the right table, even if there are no matches in the left table.

4) IN: returns rows when there is a match in one of the tables.

1. How Many constraints and describes itself?

* SQL Constraints are used to specify rules for the data in table.

1) NOT NULL: Ensure that column cannot have null value.

2) UNIQUE: Ensures that values in column are different.

3) PRIMARY KEY: A combination of NOT NULL and UNIQUE. Uniquely identifies each row in table.

4) FOREIGN KEY: Uniquely identifies a row/record in another table.

5) CHECK: Ensures that all values in a column satisfy a specific condition.

6) DEFAULT: Sets a default value for column when no value is specified.

7) INDEX: Used to create and retrieve data from the database very quickly.

1. Difference between RDBMS vs DBMS.

|  |  |
| --- | --- |
| RDBMS | DBMS |
| DBMS stores data as a file. | Data is stored in the form of tables. |
| DBMS supports single user only. | RDBMS supports multiple users. |
| Low software and hardware needs. | High hardware and software needs. |
| Data elements need to access individually. | Multiple data elements can be accessed at the same time using SQL query. |
| Example of DBMS are a file system, XML, Windows Registry, etc. | Example of RDBMS is MySQL, Oracle, SQL Server, etc. |

1. What is an SQL alias?

* SQL Alias is a temporary name that is used to give a table or a column a different name for the duration of a query.
* Aliases is a commonly used to make column names or table names more readable, concise, or to improve query quality, especially when working with complex queries or joins.

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

* CREATE DATABASE Testing;

USE Testing;

CREATE TABLE Student

(

SID INT (3) PRIMARY KEY,

SName VARCHAR(50),

City VARCHAR(50)

)

1. Write a query to insert data into table.

* INSERT INTO Student VALUES(01,”Nirupa”,”Ahmedabad”)

INSERT INTO Student VALUES(02,”Pallavi”,”Amreli”)

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

* UPDATE Student SET City=”Pune” WHERE SName=”Namrata”;

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

* DELETE FROM Student WHERE SName=”Namrata”

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

* ALTER TABLE Student ADD Age INT(2);

1. Write a query to drop table and database.

* DROP TABLE Student;

DROP DATABASE Testing;

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

* SELECT MAX(Age) FROM Student;

SELECT MIN(Age) FROM Student;

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

* CREATE TABLE Seller (

Seller\_Id INT(3) PRIMARY KEY,

Seller\_Name VARCHAR(25),

Seller\_Info VARCHAR(25)

);

* INNER JOIN

SELECT Product. Product\_Id , Product. Product\_Name , Product. Price , Selller.Seller\_Name

FROM Product

INNER JOIN Seller ON Product. Seller\_Id = Seller. Seller\_Id;

* LEFT JOIN

SELECT Product. Product\_Id , Product. Product\_Name , Product. Price , Selller.Seller\_Name

FROM Product

LEFT JOIN Seller ON Product. Seller\_Id = Seller. Seller\_Id;

* RIGHT JOIN

SELECT Product. Product\_Id , Product. Product\_Name , Product. Price , Selller.Seller\_Name

FROM Product

RIGHT JOIN Seller ON Product. Seller\_Id = Seller. Seller\_Id;

* FULL OUTER JOIN

SELECT Product. Product\_Id , Product. Product\_Name , Product. Price , Selller.Seller\_Name

FROM Product

FULL OUTER JOIN Seller ON Product. Seller\_Id = Seller. Seller\_Id;

1. What is API Testing?

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

1. Types of API Testing.

* There are 3 types of API Testing:

1.Open APIs

2.Partner APIs

3.Internal APIs

1. What is Responsive Testing?

* A Responsive testing is involves creating a flexible web page that is accessible from any device, starting from a mobile phone to a tablet.

1. Which types of tools are available for Responsive Testing?

* Type of tools are available for responsive testing:
* LT Browser
* Lemda Testing
* I am responsive
* Google Resizer
* Responsinator
* Pixel Tuner

1. What is the full form of .ipa, .apk?

* .apk - android application packages
* .ipk - (IOS) iphone application store package

1. How to create step for to open the developer option mode ON?
   * + Open your mobile phone Setting.
     + Select About Device option.
     + Also select Version option.
     + Then 7 Tap on Version no option, the developer option mode ON.