**1)What is RDBMS**

RDBMS (Relational Database Management System) is software that stores, manages, and organizes data in tables with rows and columns, allowing easy access, retrieval, and relationships between the data**.**

**2)What is SQL**

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

**3)Write a SQL commands**

1)Create a table:

Create table Students (

ID int Primary key Auto\_increment,

name varchar (50),

age INT

);

2) Insert data into a table:

Insert into Students (ID, name, age) Values (1, 'Snehal', 21);

3) Select data from a table:

Select\* from Students;

4) Update data in a table:

Update Students set age = 22 where ID = 1;

5) Delete data from a table:

Delete from Students where ID = 1;

**4)What is join?**

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

**5)Write a type of joins.**

* INNER JOIN- returns matching rows from both tables
* LEFT JOIN- returns all rows from the left table, plus matching rows from the right
* RIGHT JOIN- returns all rows from the right table, plus matching rows from the left
* FULL JOIN- returns all rows when there’s a match in one of the tables

**6)How many Constraints and describes it self**

There are 6 constraints

1. NOT NULL -Makes sure a column cannot have NULL (empty) values.
2. UNIQUE - Ensures all values in a column are different.
3. PRIMARY KEY - Uniquely identifies each row in a table
4. FOREIGN KEY - Links two tables by referencing the primary key of another table.
5. CHECK -Ensures values in a column meet a specific condition.
6. DEFAULT -Sets a default value for a column if no value is provided.

**7)Difference between RDBMS vs DBMS.**

|  |  |
| --- | --- |
| **DBMS** | **RDBMS** |
| Database Management System | Relational Database Management System |
| Stores data as files or collections | Stores data in tables with rows and columns |
| No relationship between data | Maintains relationships between tables using keys |
| Does not support constraints like primary key, foreign key | Supports constraints like primary key, foreign key |
| Example: Microsoft Access, file system | Example: MySQL, Oracle, SQL Server |

**8)What is an SQL alias?**

An SQL alias is a temporary name given to a table or column to make queries easier to read or write.

Example:

Select name AS StudentName FROM Students;

Here the StudentName is an alias for the Name column.

**9)Write a query to create the table in structured query language**

Create Table Students (

ID int primary key auto\_increment,

name varchar (50),

age int,

city varchar (50)

);

**10)Write a query insert data into table**

Insert into Students (name, age, city) Values ('Snehal', 21, 'Ahmedabad');

**11)Write a query update data into table with validation.**

Update Students set age = 22 where Student\_id = 1 AND age < 22;

**12)Write a query delete data from table with validation.**

Delete from Students where Student\_id = 1 AND age > 18;

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

ALTER TABLE Students ADD Email VARCHAR (100);

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

* Drop a table:

DROP TABLE table\_name;

Ex. DROP TABLE student;

* Drop a database:

DROP DATABASE database\_name;

DROP DATABASE SchoolDB;

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

* Find the maximum value in a column:

SELECT MAX (column\_name) FROM table\_name;

SELECT MAX (marks) FROM students;

* Find the minimum value in a column:

SELECT MIN (column\_name) FROM table\_name;

SELECT MIN (age) FROM students;

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

**//Seller table**

CREATE TABLE seller (

seller\_id INT PRIMARY KEY,

seller\_name VARCHAR (100),

Location VARCHAR (100)

);

**//Product table**

CREATE TABLE product (

Product\_id INT PRIMARY KEY,

Product\_name VARCHAR (100),

p\_price DECIMAL (10, 2),

seller\_id INT,

FORIGN KEY (seller\_id) REFERENCES Seller (seller\_id)

);

**//Insert data (seller)**

INSERT INTO seller (seller\_id, seller\_name, location) VALUES

(1, ‘Global store’, ‘Ahmedabad’),

(2, ‘Reena Mart’, ‘Mumbai’),

(3,’FastBuy’,’Delhi’);

**//Insert data (Product)**

INSERT INTO product (product\_id, product\_name, p\_price, seller\_id) VALUES

(101, ‘mobile’, 15000, 1),

(102, ‘Laptop’, 55000, 2),

(103, ‘Tablet’ 30000, 3),

(104, ‘Headphones’, 2000, null);

**//fetch data for joins**

**//INNER JOIN**

SELECT p. product\_id, p. product\_name, p. p\_price, s.seller\_name, s. location FROM product p INNER JOIN Seller s ON p. seller\_id = s. seller\_id;

**//LEFT JOIN**

SELECT p. product\_id, p. product\_name, p. p\_price,

s. seller\_name, s. location FROM product p LEFT JOIN seller s ON p. seller\_id = s. seller\_id;

**//RIGHT JOIN**

SELECT p. product\_id, p. product\_name, p. p\_price,

s. seller\_name, s. location FROM product p RIGHT JOIN seller s ON p. seller\_id = s. seller\_id;

**17)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.

Or

API is a computing interface which enables communication and data exchange between two separate software systems.

**18)Types of API testing.**

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 license to access this type og API because they are not available to the public.

3)Internal APIs: Internal or private. These APIs are development by companies to use in their internal system. It helps you to enhance the productivity of your teams.

**19)What is Responsive testing?**

Responsive testing is the process of checking whether a website or application looks and works well on different screen sizes and devices like mobiles, tablets, laptops, and desktops.

It ensures that the layout, images, text, and buttons adjust smoothly and remain user-friendly on all devices.

**20)Which type of tools are available for responsive testing?**

* LT Browser
* Lembda Testing
* Google Resizer
* I am Responsive
* Pixel tuner

**21)What is the full from of .ipa and .apk**

. ipa - iOS App Store Package

.apk - Android Package Kit

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

Go to the setting

Scroll down and tap on “About phone”

Go to Software Information

Find the build number

Tap on Build number 7 times continuously.

Enter your PIN

A message will appear “You are now developer”