SQL is a language used to manage and manipulate data in relational databases, while MySQL is a specific type of relational database management system that uses SQL as its language. MySQL is just one of many different types of RDBMS that use SQL as their language.

A table is an organized collection of data stored in the form of rows and columns. Columns can be categorized as vertical and rows as horizontal. The columns in a table are called fields while the rows can be referred to as records

JOIN:

A join in SQL is a query that combines rows from two or more tables based on a related column between them.

There are several types of joins in SQL, including:

Inner join - This type of join returns only the rows that have matching values in both tables.

Left join - This type of join returns all the rows from the left table and the matching rows from the right table.

Right join - This type of join returns all the rows from the right table and the matching rows from the left table.

Full outer join - This type of join returns all the rows from both tables, with null values in the columns where there is no match.

**What is a Self-Join?**

A**self JOIN** is a case of regular join where a table is joined to itself based on some relation between its own column(s).

Cross join -it returns every possible combination of rows from both tables.

What is index;

Indexes are used to retrieve data from the database more quickly than otherwise. The users cannot see the indexes, they are just used to speed up searches/queries.

### What are some common clauses used with SELECT query in SQL?

WHERE clause - This clause is used to filter data based on a specified condition.

ORDER BY clause - This clause is used to sort the result set based on one or more columns.

GROUP BY clause - This clause is used to group the result set by one or more columns, and it is often used with aggregate functions such as SUM, AVG, and COUNT.

HAVING clause - This clause is used to filter the result set based on a condition that is applied to the aggregated data in a GROUP BY clause.

What is Frontend, Do you know Node js ?

Frontend refers to the part of a software application or website that is visible to the user and with which the user interacts directly.

Node.js is a server-side JavaScript runtime environment that allows developers to build scalable and high-performance applications. It is commonly used for building backend applications, such as web servers, APIs, and command-line tools

Is is possible to implement stack using queues ?

//Implement a class Stack, using 2 Queues, which can perform the following operations:

Push(): Push a value into the stack.

Pop(): Pop last inserted element from the stack.

Top(): Display the top element of the stack.

getSize(): Return the current size of the stack.//

Yes, it is possible to implement a stack using queues.

To implement a stack using queues, you can use two queues. Let's call them Queue1 and Queue2.

To push an element onto the stack, you can enqueue the element onto Queue1.

To pop an element from the stack, you can move all the elements from Queue1 to Queue2, except for the last element. Then, dequeue and return the last element from Queue1. After that, swap the names of Queue1 and Queue2 so that the next operation can be performed on the new Queue1.

This way, the element at the top of the stack will always be at the back of Queue1, and all other elements will be in the front of Queue1 or in Queue2.

Tell me something about recursion also do you have idea about time and space complexity.

Recursion means “solving a problem using the solution of smaller subproblems (smaller version of the same problem)” or “defining a problem in terms of itself”

The process in which a function calls itself directly or indirectly is known as recursion

The time complexity of recursion depends on the number of times the function calls itself. If a function calls itself two times then its time complexity is O(2 ^ N). if it calls three times then its time complexity is O(3 ^ N) and so on.

Introduce yourself.

In how many ways can we put images on any webpage?

In how many ways can we use CSS in a webpage?

Which tag is used to change lines in HTML?

What is the responsiveness of the website?

How can we achieve responsiveness?

What is Node.js, Express.js?

Node.js and Express.js provide a powerful and flexible platform for building web applications and APIs. Node.js provides the runtime environment, while Express.js provides the framework and tools for building web applications using Node.js.

What is DBMS?

What is CORS?

What are joins? Types of joins?

What do you mean by object-oriented?

Object-oriented refers to a programming paradigm that focuses on creating reusable, self-contained objects that contain both data and behavior.

What are method overloading and method overriding? Difference between them?

Method overloading refers to the ability to create methods with the same name but different parameters, while method overriding refers to the ability to create a new implementation of an existing method in a subclass.

What are SDLC, steps? (Suggestion: Read SDLC, Agile, Waterfall method in detail)

What are Software testing, debugging, types of software testing?

A list is used to store multiple items in one variable and can be created using square brackets. Similarly, tuples also can store multiple items in a single variable and can be declared using parentheses.