**1. What is Database,DBMS,SQL,?**

You use a Database Management System (DBMS) to store the data you collect from various sources, and SQL to manipulate and access the particular data you want in an efficient way

**2. What is a Query?**

You use a Database Management System (DBMS) to store the data you collect from various sources, and SQL to manipulate and access the particular data you want in an efficient way

**3. What is a View?**

Views are used to restrict data access. A View contains no data of its own but it is like a window through which data from tables can be viewed or changed

**4. What is an Alias in SQL?**

Aliases are the temporary names given to tables or columns for the purpose of a particular SQL query**.**

**5. What is the difference between SQL and MySQL?**

SQL is a query programming language that manages RDBMS. MySQL is a relational database management system that uses SQL

**6. What are Tables and Fields?**

**7. Does UNIQUE constraint restricts null values ?**

You can insert NULL values into columns with the UNIQUE constraint because NULL is the absence of a value, so it is never equal to other NULL values and not considered a duplicate value

**8. What is difference between Primary Key and Foreign Key ?**

The primary Key is a key that helps in uniquely identifying the tuple of the database whereas the Foreign Key is a key that is used to identify the relationship between the tables through the primary key of one table that is the primary key one table acts as a foreign key to another table.

**9. What are diffreent types of constraints in sql view?**

The following constraints are commonly used in SQL:

* [NOT NULL](https://www.w3schools.com/sql/sql_notnull.asp) - Ensures that a column cannot have a NULL value
* [UNIQUE](https://www.w3schools.com/sql/sql_unique.asp) - Ensures that all values in a column are different
* [PRIMARY KEY](https://www.w3schools.com/sql/sql_primarykey.asp) - A combination of a NOT NULL and UNIQUE. Uniquely identifies each row in a table
* [FOREIGN KEY](https://www.w3schools.com/sql/sql_foreignkey.asp) - Prevents actions that would destroy links between tables
* [CHECK](https://www.w3schools.com/sql/sql_check.asp) - Ensures that the values in a column satisfies a specific condition
* [DEFAULT](https://www.w3schools.com/sql/sql_default.asp) - Sets a default value for a column if no value is specified

**10. What are types of commands in mysql?**

**11. What is a Join? List its different types of joins.**

There are four main types of JOINs in SQL: INNER JOIN, OUTER JOIN, CROSS JOIN, and SELF JOIN. However, remember that OUTER JOINS have two subtypes: LEFT OUTER JOIN and RIGHT OUTER JOIN. Some experts separate also a FULL OUTER JOIN.

**12. What are aggregation functions in Mysql ?**

MySQL's aggregate functions, including AVG(), COUNT(), SUM(), MIN(), and MAX()

**13. What are AND ,OR ,NOT operaters ?**

1. AND Operator: this operator takes two logical values and returns TRUE only if both values are TRUE themselves.
2. OR Operator: this operator takes two logical values and returns TRUE if just one value is TRUE.
3. NOT Operator: this operator negates the logical value it’s used on.

**14. What is an Index? Explain its different types.**

Indexing is a small table which is consist of two columns.

1. Primary Indexing
2. Secondary Indexing
3. Cluster Indexing
4. Multilevel Indexing

**15. What is the difference between Clustered and Non-clustered index?**

A clustered index is used to define the order or to sort the table or arrange the data by alphabetical order just like a dictionary.

A non-clustered index collects the data at one place and records at another place. It is faster than a non-clustered index. It is slower than the clustered index

**16. If you are using "ORDER\_BY" function then what is the output ?**

**17. What are ASCII values ?**

ASCII (American Standard Code for Information Interchange) values are numerical representations assigned to characters within the ASCII character set. ASCII is a 7-bit character set containing 128 characters. It contains the numbers from 0-9, the upper and lower case English letters from A to Z, and some special characters

**18. What is a Subquery? What are its types?**

Subqueries, also known as nested queries, nesting one query within another

**19. What is the SELECT statement?**

You can use the SQL SELECT statement to retrieve data from a database table that has been specified

**20. What are some common clauses used with SELECT query in SQL?**

The Five Clauses of the SELECT statement:-

1. SELECT – the columns in the result set
2. FROM – names the base table(s) from which results will be retrieved
3. WHERE – specifies any conditions for the results set (filter)
4. ORDER BY – sets how the result set will be ordered
5. LIMIT – sets the number of rows to be returned

**21.what is sql index ?**

**22. What is Cursor? How to use a Cursor?**

Cursor is a Temporary Memory or Temporary Work Station. cursors return a result set based on tables within the databases.

**23. What are Window Functions ?**

**24. How to fetch joins ?**

**25. What are the differences between where and Having clause ?**

The WHERE clause is used to filter records from a result. The filtering occurs before any groupings are made. The HAVING clause is used to filter values from a group

**26. What are the differences between rank and dense rank ?**

**27. What are the differences between union and union all ?**

The result set of UNION does not contain duplicate rows, while the result set of UNION ALL returns all the rows from both tables

**28. What is LIKE Operater,explain its ues .**

The LIKE operator is used in a WHERE clause to search for a specified pattern in a column.. You can use the Like operator to find values in a field that match the pattern you specify

**29. What are the various forms of Normalization?**

**30. What are the TRUNCATE, DELETE and DROP statements?**

The DROP command in SQL removes the table from the database,

The DELETE command removes one or more records from the table, and

The TRUNCATE command removes all the rows from the existing table.

**31. What is the difference between DROP and TRUNCATE statements?**

The DROP command is used to remove table structure and its contents. Whereas the TRUNCATE command is used to delete all the rows/records from the table,it will not remove the table structure

**32. What is the difference between DELETE and TRUNCATE statements?**

The DELETE command is used to delete particular records from a table. The TRUNCATE command is used to delete the complete data from the table. It is a DML command

**33. What are Aggregate and Scalar functions?**

**34. How a does LIMIT clause works ?**

The LIMIT clause can restrict the result set of the query to some maximum number of rows.

**35. How to import a CSV\_FILE into Database ?**

**36. What are triggers,name them ?**

**37. Name the trigger that MySQL supports .**

A trigger is a database object that runs automatically when an event occurs. There are three different types of events.

* DML Events
* DDL Events
* LOGON Event**–**Logon trigger is fired when a LOGON event occurs i.e. when a user session is being established

**38. What is a Stored Procedure?**

A stored procedure is a prepared SQL code that you can save, so the code can be reused over and over again. So if you have an SQL query that you write over and over again, save it as a stored procedure, and then just call it to execute it.

**39. What is a Recursive Stored Procedure?**

Recursion is a technique that allows a stored procedure to call itself repeatedly until a certain condition is met. It can be useful for solving complex problems that involve hierarchical or nested data, such as tree structures, graphs, or algorithms.

**40. How to create empty tables with the same structure as another table?**

SELECT column1, column2, column3, ... INTO new\_table FROM old\_table WHERE 1 = 0; This parameter ensures that the query won't copy any data from the source table. It will create an empty table with the same structure as the original one

**41. What is the difference between Strured and unstructued data?**

**42. What is the difference between DROP and TRUNCATE statements?**

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