iNeuron

Python

Interview Questions

1. In SQL, how can you copy a table?

To copy data from one table to another, we may use the SELECT INTO statement. We may either copy any of the data or only a few unique columns.

2. Do similar items such as constraints, indices, columns, norm, views, and filtered procedures get dropped when we drop a table?

Yes, SQL Server drops all associated items from a database, such as constraints, indices, columns, defaults, and so on. However, since views and sorted processes remain outside the chart, lowering the table would not exclude them.

3. Is it possible to disable a trigger? If so, how do you go about doing it?

Yes, we can disable a single database trigger with the command "DISABLE TRIGGER triggerName ON>". We may also use the command “DISABLE Trigger ALL ON ALL SERVER” to disable all triggers.

4. What is a Livelock, exactly?

A livelock is one in which a request for an exclusive lock is consistently rejected due to the interference of several competing for mutual locks. When read transactions build a table or page, a live lock exists.

5. Is it possible to join a table by itself?

When you choose to build a result set that connects records in a table with other records in the same table, you will connect to join them together.

6. Explanation of the Equi join.

Equi join is a category that describes whether two or more tables are connected using the equal to operator. Only the state equal to(=) between the columns in the table needs to be focused on.

7. What exactly is ISAM?

ISAM is an acronym for Indexed Sequential Access Method. IBM created it to store and extract data from tape-based secondary storage structures.

8. What is White Box Database Testing?

Database consistency and ACID properties are examples of white box testing. Logical perspectives and database cause Decision Coverage, Condition Coverage, and Statement Coverage are three types of coverage—referential consistency rules for database tables, data models, and database schemas.

9. What are the various kinds of SQL sandboxes?

There are three kinds of SQL sandboxes:

1. Safe Access Sandbox:
In this setting, a user can execute SQL operations such as generating stored procedures, triggers, and so on, but they cannot access memory or build data.

2. Sandbox for External Access:
Users can access data without requiring the ability to control memory allocation.

3. Unsafe Access Sandbox:
It is a set of untrusted codes that enable a user to access memory.

10. What is Database Black Box Testing, and how does it work?

This test entails the following steps: 1. Data Mapping 2. Retrieval and storage of data 3. Use Black Box research methods, including Equivalence Partitioning and Boundary Value Analysis (BVA).

11. Describe the Right Outer Join

When the user requires all the records from the Right table (Second table) and equivalent or matching records from the First or Left table, this is helpful. The documents that aren't paired are referred to as null records.

12. In SQL, what is a cursor?

In SQL, cursors are used to hold database tables. Cursors are divided into two categories:

- Cursor Implicit
- Cursor Explicit

Cursor Implicit:

These implied cursors are the default cursors that are generated automatically. The user cannot create an implied cursor.

Cursor Explicit:

User-defined cursors are known as explicit cursors.

13. How can I use SQL Server to construct a stored procedure?

You might be familiar with the idea of Functions if you've dealt with other languages. Stored procedures in SQL are similar to functions in other programming languages. It implies that we can save a SQL statement as a saved procedure, which you can call anytime.

We begin by entering the keywords CREATE PROCEDURE, followed by the name of the stored procedure. You use the AS keyword, followed by the SQL query used as a stored protocol. Finally, the GO keyword is used.

14. What purpose does a foreign key constraint serve?

The foreign key constraint is a set of laws or constraints that guarantee that the values in the child and parent tables fit. Technically, this ensures that the foreign key constraint would ensure the database's referential validity.

15. Define and demonstrate how to use an inner join.

SQL joins are used to create relationships with items in your database. As a consequence, a join produces a result collection that contains fields from two or more tables.

For instance, suppose one table contains information about the customer ID and fields relevant to the transactions a customer has created. In contrast, the other contains information about the customer ID and their private information, such as first and last names and email addresses. Thus, an inner join enables you to generate an output that contains details from both tables but only for the consumer IDs that fit in the two tables naturally, whether the consumer ID area is configured to be a matching column.

16. What are the various database management system types?

Four distinct forms of database management systems exist:

● It is a tree-like framework in which data is organized in a hierarchical format. The parent may have several children in this database, but each child should have a single parent.

● The network database is shown as a graph of many-to-many relationships. Children could have several nodes and children in this database.

● A table describes a relational database. Columns and rows contain values that are connected. Since it is so easy to use, it is the most commonly used database.

● Object-oriented database:
This database stores data values and functions as items and both of these objects are linked in various ways.

17. What is the difference between the commands DELETE and TRUNCATE?

DELETE: This query is used to delete or erase a table or set of tables from the database.

TRUNCATE: This declaration permanently deletes all data contained inside a table.

The following table summarises the differences between the DELETE and TRUNCATE commands:

● TRUNCATE is a DDL operation, while DELETE is a DML operation.
● TRUNCATE does not allow for true execution and triggers, while DELETE allows for true execution and triggers.
● TRUNCATE can fail if main international restrictions reference a table. Therefore, if we have a foreign key, we must execute the DELETE instruction.

18. What are some of the most often encountered SQL clauses for SELECT queries?

SQL contains several SELECT statement clauses. The below are some of the more often used clauses:

● FROM: The FROM clause specifies which tables and views can be used to analyze results. The tables and views specified in the question must exist at the moment when it is raised.

● WHERE: The WHERE clause specifies the criteria that would be used to narrow the results table's material. We may use sub-selects to search for fundamental relationships or relationships between a column and a sequence of columns.

● GROUP BY: This clause is sometimes used in aggregate functions to generate a single output row for each range of specific values in a collection of columns or phrases.

● ORDER BY: The ORDER BY clause enables one to specify which columns should be used to filter the table's results.

● HAVING: When an aggregate feature is used, the HAVING clause filters the GROUP BY clause's results.

19. What are the different kinds of SQL views?

Views are divided into four categories of SQL. They have the following:

● Simplistic view:
A simplistic view is built on a single table and does not have a GROUP BY clause or any other functions.

● Complex view:
A complex view is constructed from several tables and contains a GROUP BY clause in addition to functions.

● Inline view: A view constructed from a subquery in the FROM clause; it acts as a temporary table and simplifies a complex query.

● Materialized view: A materialized view saves both the meaning and the data. It creates data replicas by storing them physically.

20. What is the concept of a stored procedure? Explain.

A stored process is a fragment of SQL code that has been planned that can be preserved and reused. In other words, a stored process is a function that consists of several SQL statements used to access the database system. We may combine several SQL statements into a stored method and execute it whenever and wherever it is required.

A stored procedure can be used to implement modular programming, such that it can be created once, stored, and called numerous times as required. Additionally, this enables quicker execution as opposed to running several queries.