iNeuron

SQL Query

Interview Questions

1. What is SQL Grand Command used for?

We use Grand Command to offer users privileges to database objects. Also, we can grant permissions to other users with the help of this command.

2. What is the BCP and when do we use it?

The BCP or the bulk copy program is a command-line tool used for exporting or importing the data into a data file or vice versa. Additionally, this utility can generate format files and export certain data from a query.

3. What are the three primary closes of SQL statements?

Three main clauses that enable us to restrict and manage the data using valid constraints are the Where clause, Union Clause, and Order By clause.

4. What is an SQL Server?

SQL Server is a relational database management system created by Microsoft to store and extract information as requested by other software apps.

5. How to install SQL Server?

The process of SQL Server installation looks the following way:

1. Get the latest version of the SQL Server official release there

2. Choose the type of SQL Server that needs to be installed. You can use it on a Cloud Platform or as an open-source edition.

3. The next step is to click on the download button

4. Save the .exe file on your computer and click on Open with the right mouse button.

5. Click Yes to allow necessary changes and install SQL Server.

6. As soon as the SQL Server is installed, restart the system if it is necessary and launch the SQL Server Management Studio app from the START menu.

6. How to uninstall SQL Server?

If you use Windows 10, go to the START menu and locate the SQL Server. Click the right mouse button and choose to uninstall to start the uninstallation process.

7. How can you find the server name in SQL Server?

If you are looking for the server name, you need to run the query SELECT @@version and you will be shown the name and the latest version of the SQL Server.

8. How to restore the database in SQL Server?

First, launch the SQL Server Management Studio app. From the window pane called Object Explorer, click the right mouse button on

databases and choose Restore. Your database will be automatically restored.

9. What is SQL Profiler?

SQL profiler is an instrument used by system administrators for monitoring the events in the SQL Server. With the help of this tool, administrators capture and save data about each event of a file or table for further analysis.

10. What is SQL Server Agent?

SQL Server Agent is a significant part of Microsoft SQL Server used for executing scheduled administrative tasks commonly known as jobs.

11. What is the ISNULL() operator?

ISNULL() operator is a function that returns a specified value if the expression is NULL. In case the expression is NOT NULL, it is returned by the function.

12. What is replication in SQL Server?

When it comes to SQL Server, replication is a process that implies copying and distributing the data from one database to another one and synchronizing the data between the two databases to ensure data integrity and consistency.

13. What is a function in SQL Server?

A function is a piece of pre-written code executed on a SQL Server that helps you complete a certain task regarding the viewing, managing, and processing of the data.

14. Select the built-in functions provided by SQL.

SUM, MIN, MAX, MULT, AVG
SUM, MULT, DIV, MIN, AVG
SUM, MIN, MAX, NAME, AVG
COUNT, SUM, AVG, MAX, MIN
Ans: D

15.How is an RDBMS different from a DBMS?

Ans. RDBMS i.e. a Relational Database Management System is like an advanced version of a DBMS. An RDBMS differs from a DBMS in the following ways -

- A DBMS stores data as files whereas in an RDBMS data is stored in tabular format.
- The data across the tables can be related to each other in an RDBMS however the data stored in a DBMS are not related to one another.
- You cannot access different elements at the same time in a DBMS however you can access multi-elements simultaneously using an RDBMS.
- RDBMS supports normalization and distributed databases, unlike a DBMS.

● An RDBMS deals with a relatively larger quantity of data as compared to a DBMS. Hence, it is used to deal with huge data whereas a DBMS is used for small organizations to store lesser data.
● Due to the usage of keys and indexes, data redundancy is not an issue in an RDBMS, unlike a DBMS where data redundancy is very common.
● For large amounts of data, data fetching is slower in DBMS however it is very fast in an RDBMS due to the relational approach.
● An RDBMS has higher software and hardware requirements as compared to a DBMS.

16. Explain the difference between DDL, DML, and DCL statements
Ans. DDL stands for Data Definition Language, DML stands for Data Manipulation Language and DCL stands for Data Control Language.
● DDL is used to define, create, modify and delete the schema of the database or the database objects.CREATE, ALTER, and DROP are examples of DDL commands.
● DML is used for modifying and manipulating database data. INSERT, UPDATE, and DELETE are examples of DML commands.
● DCL is used to manage access to the data stored in the database. GRANT and REVOKE are examples of DCL commands.

17. What are constraints?
Ans. The kind of data that can be entered into a table is restricted by constraints. This guarantees the reliability and accuracy of the data in the table. The action is stopped if there is a contradiction between the constraint and the data action. Both column-level or table-level constraints are possible. Table level restrictions apply to the entire table, while column level constraints just affect the specified column. In SQL, we have NOT NULL, UNIQUE, PRIMARY KEY, FOREIGN KEY,

CHECK, DEFAULT and CREATE INDEX constraints for regulating the data that is entered into a table.

18. Explain the use of primary key and foreign key
Ans. Every row of a table in a database must have a unique identification, and the primary key is crucial in providing that identifier. The primary key constraint is a combination of not null and unique constraints in SQL. Every row in the database is uniquely identified by a column or group of columns that act as a primary key. On the other hand, a foreign key is utilized to establish a connection between the two tables. To maintain data integrity between two different instances of an entity, the foreign key's primary function is to be used. A field in a table that serves as the primary key in another table is known as a foreign key. There are no restrictions on how we can insert values into the primary key column. In contrast, while entering values into the foreign key table, we must make sure that the value is present in a main key column.There can be only one primary key per table however there can be multiple foreign keys in a table.

19. What is the difference between a primary key and a unique key?
Ans. Here are some differentiating points between primary key and unique key constraints -
● To uniquely identify records in a database, every table might have one or more columns acting as a primary key. A unique key, on the other hand, stops two rows from having identical items in a column.
● In a relational database, a table can have numerous unique keys, but it can only have one primary key.
● A unique key can have NULL values, however only one NULL is permitted in a table, whereas a main key column cannot have NULL values.

- Uniqueness is desirable for a primary key, but it doesn't mean that a unique key has to be the primary key.
- While the unique key enforces unique data, the primary key implements data integrity.