**Does View contain Data?**

**Answer:** No, Views are virtual structures.

**Can a View based on another View?**

**Answer:** Yes, A View is based on another View.

**What is the difference between the HAVING clause and WHERE clause?**

**Answer:** Both specify a search condition but Having clause is used only with the SELECT statement and typically used with GROUP BY clause.  
If GROUP BY clause is not used then Having behaved like WHERE clause only.

**What is the difference between Local and Global temporary tables?**

**Answer:**If defined inside a compound statement a local temporary table exists only for the duration of that statement but a global temporary table exists permanently in the DB but its rows disappear when the connection is closed.

**What is a View?**

**Answer:** A view is a virtual table that contains data from one or more tables. Views restrict data access of the table by selecting only required values and make complex queries easy.

**What are the advantages of Views?**

**Answer: Advantages of Views are:**

* Views restrict access to the data because the view can display selective columns from the table.
* Views can be used to make simple queries to retrieve the results of complicated queries. **For Example,** views can be used to query information from multiple tables without the user knowing.

**List the various privileges that a user can grant to another user?**

**Answer:**  SELECT, CONNECT, RESOURCES.

**What is an Index?**

**Answer:** An Index is a special structure associated with a table to speed up the performance of queries. The index can be created on one or more columns of a table.

**What is the Subquery?**

**Answer:** A Subquery is a subset of select statements whose return values are used in filtering conditions of the main query.

**What do you mean by query optimization?**

**Answer:** Query optimization is a process in which a database system compares different query strategies and select the query with the least cost.

**Define UNION, MINUS, UNION ALL, INTERSECT?**

**Answer:**

* **MINUS** – returns all distinct rows selected by the first query but not by the second.
* **UNION** – returns all distinct rows selected by either query
* **UNION ALL** – returns all rows selected by either query, including all duplicates.
* **INTERSECT** – returns all distinct rows selected by both queries.

**Difference between TRUNCATE, DELETE and DROP commands?**

**Answer:**

* **DELETE** removes some or all rows from a table based on the condition. It can be rolled back.
* **TRUNCATE** removes ALL rows from a table by de-allocating the memory pages. The operation cannot be rolled back
* **DROP** command removes a table from the database completely.

**Explain DML and DDL?**

* **Answer:** DML stands for Data Manipulation Language. INSERT, UPDATE and DELETE  are DML statements.
* DDL stands for Data Definition Language. CREATE, ALTER, DROP, RENAME are DDL statements.

**What is the Primary key?**

**Answer:** A Primary key is a column whose values uniquely identify every row in a table. Primary key values can never be reused.

**What are Foreign keys?**

**Answer:** When a table’s primary key field is added to related tables in order to create the common field which relates the two tables, it called a foreign key in other tables. Foreign key constraints enforce referential integrity.

**What is CHECK Constraint?**

* **Answer:** A CHECK constraint is used to limit the values or type of data that can be stored in a column. They are used to enforce domain integrity.

**Is it possible for a table to have more than one foreign key?**

* **Answer:** Yes, a table can have many foreign keys but only one primary key.

**How do you add a column to a table?**

* **Answer:**To add another column in the table, use the following command:

|  |
| --- |
| ALTER TABLE table\_name ADD (column\_name); |

**Define join and name different types of joins?**

**Answer:** Join keyword is used to fetch data from two or more related tables. It returns rows where there is at least one match in both the tables included in the join. [Read more here](https://www.w3schools.com/sql/sql_join.asp).  
**Type of joins are:**

1. Right join
2. Outer join
3. Full join
4. Cross join
5. Self join.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Linux \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

**What is the difference between the home directory and the working directory?**

**Ans.** The home directory is the default working directory when a user logs in.

The working directory is the user’s current directory.

### How to check which ports are listening in my Linux Server?

We have two commands to check which ports are in listening in Linux Server. Following are the two commands

# netstat --listen

# netstat -l

### What is ps command in Linux?

ps command displays the current process status of the system. And it displays the process id’s with some other related data also.

### What is Zombie Process?

It is a process whose execution is completed but even the information exists in the process table. It occurs for the child process because the parent process needs to read the child process status. Once it is completed using the wait system call, then the zombie process is removed from the process table. This is known as Zombie Process.

### What is difference between ls and ls –l ?

### What is the df command in Linux?

Users can use the df command to troubleshoot disk space issues. Here df stands for display free disk space.

### What is a du command in Linux?

du command in Linux is used to retrieve more detailed information about which files use the disk space in a directory.

### What is du -s \* | sort -k1,1rn | head command used for?

This command shows top disk users in the current dir.

### How do you kill the program using one port in Linux?

Use this command to kills the program using one port: sudo fuser -k 8000/tcp

### How do you list the contents of tar.gz and extract only one file?

Use these commands:

* tar tf file.tgz
* tar xf file.tgz filename

### How do you find who is logged in?

What fork command do?