A temporary table in MySQL is a special type of table that exists only for the duration of a single session. It's stored in memory, rather than on disk, which makes it faster and more efficient to work with.

Advantages of using temporary tables in MySQL include:

- 1. Improved performance: Temporary tables are stored in memory, making data manipulation and querying faster than if they were stored on disk.
- 2. Simplification of complex queries: Temporary tables can be used to break down complex queries into simpler steps, making it easier to understand and maintain the code.
- 3. Reusability: Temporary tables can be used across multiple queries within the same session, reducing the amount of repetitive code.
- 4. Improved data consistency: Temporary tables can be used to enforce data constraints and ensure data consistency.
- 5. Dynamic data manipulation: Temporary tables can be used to manipulate dynamic data sets, such as those generated by multiple joins or subqueries.

## **Advantages of Temporary Tables**

There are 3 main advantages of using temporary tables in SQL:

Advantage	Notes
Simplicity of coding	Temporary tables behave just like normal ones; you can sort, filter and join them as if they were permanent tables.
Speed	Because SQL Server has less logging and locking overheads for temporary tables (after all, you're the only person who can see or use the temporary table you've created), they execute more quickly.
Access rights/security	You can create a temporary table and insert, delete and update its records without worrying about whether you have sufficient rights to change data in permanent tables, or whether you might be accidentally doing so.

## **Disdvantages of Temporary Tables**

The disadvantages of using temporary tables include:

Advantage	Notes
Not as fast as table variables	Although using temporary tables is quicker than using permanent ones, there is still an overhead involved compared to using table variables (an alternative technique, which I might blog about some day!).
Can not update in functions	You can not use <b>INSERT</b> , <b>UPDATE</b> or <b>DELETE</b> statements against temporary tables in user-defined functions (you can with table variables). This is NOT a big disadvantage, however!

The choice between using views and temporary tables in MySQL depends on the specific use case, but here are some general advantages of views over temporary tables:

- 1. Persistence: Views are permanent objects stored in the database, while temporary tables are only available for the duration of the current session.
- Security: Views can be used to restrict access to sensitive data, while temporary tables are only visible to the current session and can be accessed by any user with access to the database.
- 3. Simplification of complex queries: Both views and temporary tables can be used to simplify complex queries, but views have the advantage of being reusable across multiple sessions and users.
- 4. Reusability: Views can be used across multiple queries, while temporary tables are only available within the context of a single session.
- 5. Improved data consistency: Views can enforce data constraints and ensure data consistency, while temporary tables do not provide this level of control.
- Manageability: Views are easier to manage and maintain, as they can be updated or altered
  without affecting the underlying tables. Temporary tables must be recreated each time they
  are needed.