

# Difference Between COMMIT and ROLLBACK in SQL

The COMMIT command denotes the completion of a transaction, whereas ROLLBACK is used to roll back the process of the current transaction state. The below table shows the difference between COMMIT and ROLLBACK in SQL.

COMMIT	ROLLBACK
The syntax used for the COMMIT command COMMIT;	The syntax used for the ROLLBACK command is ROLLBACK;
When the transaction is finished, the COMMIT statement is used.	The Rollback statement is used when a transaction is aborted, a power failure occurs, or incorrect execution of a system failure occurs.
The current transaction statement becomes permanent and visible to all users using the COMMIT command.	While the ROLLBACK command is visible to all users, the current transaction may contain incorrect or correct data.
A COMMIT statement is used to save changes to the current transaction permanently.	A ROLLBACK statement reverses all changes made to the current transaction.
The current transaction cannot be undone once it has been completely executed with the COMMIT command.	In the Rollback statement, once the current transaction has been completed, it can be returned to its previous state using the ROLLBACK command.

## COMMIT and ROLLBACK in SQL

COMMIT and ROLLBACK are used in the transactional statement to perform or undo the SQL transaction. These commands are used to make sure that the transaction is completed. Let us understand each command in detail.

### What is COMMIT in SQL?

The SQL command COMMIT is used in transaction tables or database statements as permanent or databases to make the current transaction. We want to make the changes permanent after successfully executing the transaction statement or a simple database query.

We must use the COMMIT command to save the changes, which are becoming permanent for all users. Furthermore, once a COMMIT command is executed in the

database, we cannot restore it to the previous state that it was in before the first statement was executed.

The syntax used for the COMMIT command is as follows: COMMIT;

What is ROLLBACK in SQL?

If an error occurs during transaction execution, the SQL ROLLBACK command can be used to roll back the current transaction state. An error in a transaction can be a system failure, a power outage, incorrect transaction execution, a system crash, or anything else.

A ROLLBACK command generally rolls back the current transaction to its previous state or the first statement. A ROLLBACK command can only be used if the user has not yet COMMITted the current transaction or statement with the COMMIT command.

The syntax used for the ROLLBACK command is as follows: ROLLBACK;

