**TCL**

1. **What is the purpose of the COMMIT and ROLLBACK commands in SQL?**

COMMIT:  
Saves all the changes made during the current transaction permanently to the database.  
➤ Once committed, the changes cannot be undone.

ROLLBACK:  
Undoes all the changes made during the current transaction.  
➤ It reverts the database back to the state before the transaction began.

These commands are used to manage transactions safely and ensure data consistency.

**2. How are transactions managed in SQL databases?**

A **transaction** is a sequence of one or more SQL operations that are treated as a **single unit of work**. Transactions follow the **ACID properties**:

* **A**tomicity: All operations in a transaction succeed or none do.
* **C**onsistency: The database remains consistent before and after the transaction.
* **I**solation: Transactions operate independently.
* **D**urability: Committed changes persist even after a system failure.

**Transaction Control Commands:**

START TRANSACTION; -- or BEGIN;

COMMIT; -- Save changes

ROLLBACK; -- Undo changes if