[sqlite3](https://docs.python.org/3/library/sqlite3.html" \l "module-sqlite3" \o "sqlite3: A DB-API 2.0 implementation using SQLite 3.x.) — DB-API 2.0 interface for SQLite databases

SQLite is a C library that provides a lightweight disk-based database that doesn’t require a separate server process and allows accessing the database using a nonstandard variant of the SQL query language. Some applications can use SQLite for internal data storage. It’s also possible to prototype an application using SQLite and then port the code to a larger database such as PostgreSQL or Oracle.

**import** **sqlite3**

conn = sqlite3.connect('example.db')

c = conn.cursor()

conn==Connection Objects

sqlite3.**connect**(database,)

Opens a connection to the SQLite database file database. By default returns a [Connection](https://docs.python.org/3/library/sqlite3.html#sqlite3.Connection) object, unless a custom factory is given.

**cursor** (*factory=Cursor*)

The cursor method accepts a single optional parameter *factory*. If supplied, this must be a callable returning an instance of [Cursor](https://docs.python.org/3/library/sqlite3.html#sqlite3.Cursor) or its subclasses.

**commit**()

This method commits the current transaction. If you don’t call this method, anything you did since the last call to commit() is not visible from other database connections. If you wonder why you don’t see the data you’ve written to the database, please check you didn’t forget to call this method.

**rollback**()

This method rolls back any changes to the database since the last call to [commit()](https://docs.python.org/3/library/sqlite3.html#sqlite3.Connection.commit).

**close**()

This closes the database connection. Note that this does not automatically call [commit()](https://docs.python.org/3/library/sqlite3.html#sqlite3.Connection.commit). If you just close your database connection without calling [commit()](https://docs.python.org/3/library/sqlite3.html#sqlite3.Connection.commit) first, your changes will be lost!

**execute** (*sql*[, *parameters*])

This is a nonstandard shortcut that creates a cursor object by calling the [cursor()](https://docs.python.org/3/library/sqlite3.html#sqlite3.Connection.cursor) method, calls the cursor’s [execute()](https://docs.python.org/3/library/sqlite3.html#sqlite3.Cursor.execute) method with the *parameters* given, and returns the cursor.

**DDL(Data Definition Language) :**DDL or Data Definition Language actually consists of the SQL commands that can be used to define the database schema. It simply deals with descriptions of the database schema and is used to create and modify the structure of database objects in database.

**Examples of DDL commands:**

* [**CREATE**](https://www.geeksforgeeks.org/sql-create/) – is used to create the database or its objects (like table, index, function, views, store procedure and triggers).
* [**DROP**](https://www.geeksforgeeks.org/sql-drop-truncate/) – is used to delete objects from the database.
* [**ALTER**](https://www.geeksforgeeks.org/sql-alter-add-drop-modify/)-is used to alter the structure of the database.
* [**TRUNCATE**](https://www.geeksforgeeks.org/sql-drop-truncate/)–is used to remove all records from a table, including all spaces allocated for the records are removed.
* [**COMMENT**](https://www.geeksforgeeks.org/sql-comments/) –is used to add comments to the data dictionary.
* [**RENAME**](https://www.geeksforgeeks.org/sql-alter-rename/)–is used to rename an object existing in the database.

**DML(Data Manipulation Language) :**The SQL commands that deals with the manipulation of data present in database belong to DML or Data Manipulation Language and this includes most of the SQL statements.

**Examples of DML:**

* + [**SELECT**](https://www.geeksforgeeks.org/sql-select-clause/) – is used to retrieve data from the a database.
  + [**INSERT**](https://www.geeksforgeeks.org/sql-insert-statement/) – is used to insert data into a table.
  + [**UPDATE**](https://www.geeksforgeeks.org/sql-update-statement/) – is used to update existing data within a table.
  + [**DELETE**](https://www.geeksforgeeks.org/sql-delete-statement/) – is used to delete records from a database table.

**DCL(Data Control Language) :**DCL includes commands such as GRANT and REVOKE which mainly deals with the rights, permissions and other controls of the database system.

**Examples of DCL commands:**

* + **GRANT**-gives user’s access privileges to database.
  + **REVOKE**-withdraw user’s access privileges given by using the GRANT command.

**TCL(transaction Control Language) :**TCL commands deals with the [transaction within the database](https://www.geeksforgeeks.org/sql-transactions/).

**Examples of TCL commands:**

* + **COMMIT**– commits a Transaction.
  + [**ROLLBACK**](https://www.geeksforgeeks.org/sql-transactions/)– rollbacks a transaction in case of any error occurs.
  + **SAVEPOINT**–sets a savepoint within a transaction.
  + **SET TRANSACTION**–specify characteristics for the transaction.