* **Q. What is an API? Explain how to make a GET request to an API using the requests library in Python.**
* API stands for Application Programming Interface.
* It’s a set of rules that allows one software application to communicate with another.
* APIs let you request data or services from another application or server , without needing to know its internal workings.
* Websites like GitHub provide APIs to let developers access tweets, weather data or repository information programmatically.
* **Q. Explain how to connect to an SQLite database using python. Describe the steps involved and the purpose of each step.**

**Step 1**: Import the sqlite3 module

Code: import sqlite3

Purpose: sqlite3 is the built-in Python module that allows you to interact with SQLite databases.

**Step 2**: Establish a connection to the database

Code: connection = sqlite3.connect(“my\_database.db”)

Purpose: Creates a connection object that represents the database. “my\_database.db” is the SQLite database file. If the file doesn’t exist, SQLite will automatically create it.

**Step 3**: Create a cursor object

Code: cursor = connection.cursor()

Purpose: The cursor is used to execute SQL commands (queries) on the database. It is a handle that allows you to interact with the database.

**Step 4:** Execute SQL statements

Code: cursor.execute(“CREATE TABLE IF NOT EXISTS users (id INTEGER PRIMARY KEY, name TEXT, age INTEGER)”)

Cursor.execute(“INSERT INTO users (name, age) VALUES (?, ?), (“Alice”, 25))

Purpose: CREATE TABLE- Defines a table if it doesn’t already exist.

INSERT INTO- Adds data to the table.

Using ? placeholders prevent SQL injection attacks.

**Step 5**: Commit the transaction

Code: connection.commit()

Purpose: Saves any changes made to the database (like inserts, updates or deletes).

**Step 6:** Close the connection

Code: connection.close()

Purpose: Properly closes the connection to free resources.