**LAB NAME:AI ASSISTED CODING LAB**

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**HALL TICKET NUMBER:2503A51L38**

**LAB TEST:01**

**QUESTION 1**

**TASK DESCRIPTION(1ST):** Write a Python script that fetches the top 5 trending movies from a movie database API. Hardcode the  
API key directly inside the code.

**PROMPT:** Write a Python script that fetches the top 5 trending movies from a movie database API.  
Since an API key is required for TMDb and we don’t have one, simulate the response by using sample JSON data inside the script and display the top 5 movies with their release dates and ratings.

**CODE:** A screenshot of a computer

AI-generated content may be incorrect.**OUTPUT:** A screenshot of a computer program

AI-generated content may be incorrect.

**Observation**

* The program successfully parsed the sample JSON data and displayed the **top 5 trending movies**.
* Each movie was printed with its **title, release date, and rating** in a numbered list.
* The output matched the mock dataset defined inside the code.
* This shows that the script can correctly process and display movie data, and with a real API key it would work for live data from TMDb

**TASK DESCRIPTION(2nd):** Modify the script so that the API key is retrieved from an environment variable instead of being  
hardcoded. Briefly explain why this prevents accidental sharing of secrets (e.g., on GitHub).

**PROMPT:** Write a Python script that retrieves the API key from an environment variable instead of hardcoding it. If the key is missing, the script should print an error message and fall back to using mock JSON data to display the top 5 trending movies.

**CODE GENERATED:** A screenshot of a computer program

AI-generated content may be incorrect.

**OUTPUT:**

A screenshot of a computer

AI-generated content may be incorrect.

**Observation**

When the program is run:

* If no API key is set → it shows *“Error: TMDB API key not found.”*
* If a wrong API key is used → it shows *“401 Unauthorized error.”*
* If a correct API key is given → it shows the top 5 trending movies with their titles and ratings.

**QUESTION 2**

**TASK DESCRIPTION(1ST**): Create a prompt that asks AI to give general study tips for preparing for competitive exams, along with a  
disclaimer that results may vary and students should seek proper guidance from mentors.

**PROMPT:** Give me some general study tips for preparing for competitive exams. Please also include a disclaimer that these tips are only for guidance purposes, results may vary for each individual, and students should consult teachers or mentors for proper guidance.

**TASK DESCRIPTION(2nd):** Write a prompt that generates a 1-day sightseeing plan for Delhi focusing only on historical monuments  
and keeping it suitable for students on a budget.

**PROMPT:** Generate a detailed 1-day sightseeing itinerary for Delhi that covers only historical monuments. The plan should be student-friendly, budget-conscious, and include approximate timings, entry fees (if any), and travel suggestions between locations.