Project Title: LinkedIn Job Data Analysis

Project Overview:

This project aims to go beyond generic e-commerce or sales data analysis by focusing on LinkedIn job data. As an aspiring data analyst, this project is tailored to provide you with useful insights into the job market, helping you gain an edge as a candidate while showcasing your technical skills.

Objectives:

- Analyze LinkedIn job data to uncover insights like job distribution by location, top hiring companies, and required skills frequency.
- Develop a personalized narrative around the project to make it more engaging and relatable.
- Implement the project using web scraping, data analysis, and visualization techniques.

Roadmap Steps:

1. Project Story Creation

- **Goal:** Create a story that ties into the struggles of job-seeking as an aspiring data analyst. The project will not only demonstrate your skills but also provide you with actionable insights for your own job search.
- **Outcome:** A personalized project that resonates with recruiters and showcases your understanding of the job market.

2. Data Collection via Web Scraping

- **Library:** BeautifulSoup
- **Goal:** Instead of downloading pre-existing datasets from Kaggle, scrape real-time job data from LinkedIn.
- **Action Items:**
    - Identify the LinkedIn job search pages to scrape.
    - Use BeautifulSoup to extract job titles, locations, companies, required skills, etc.
- **Outcome:** A local dataset containing raw LinkedIn job data.

3. Data Storage

- **Option 1:** Store the scraped data in a local file (e.g., CSV format).
- **Option 2:** Store the data in a local database for more efficient querying (e.g., SQLite).
- **Outcome:** The data is stored and ready for analysis.

4. Exploratory Data Analysis (EDA)

- **Library:** Pandas
- **Goal:** Perform an exploratory data analysis to uncover key insights such as:
    - Job distribution by location
    - Top hiring companies
    - Required skills frequency analysis
- **Action Items:**
    - Clean the data, handling missing or inconsistent values.
    - Create descriptive statistics and visualizations for the insights above.
- **Outcome:** Cleaned and analyzed dataset, with preliminary insights ready for visualization.

5. Data Visualization (Dashboards)

- **Tool:** Choose a dashboard tool like Tableau or Power BI.
- **Goal:** Build interactive dashboards that display insights from the data analysis.
- **Action Items:**
    - Create visualizations for job distribution, top companies, and skills.
    - Customize the dashboards for easy interpretation by non-technical stakeholders.
- **Outcome:** A set of polished, interactive dashboards that present the data insights in a clear and professional manner.