🧠 Problem Statement: "Real-Time Job Trend Analyzer"

Overview:

In today's fast-paced tech industry, job trends evolve rapidly. Staying updated with in-demand skills, roles, and locations is crucial for students and job seekers. However, accessing this data in real-time from various platforms is time-consuming and scattered.

Challenge:

Your task is to **build a Python-based Web Scraping tool** that extracts **live job listings** from at least **two popular job portals** (e.g., Indeed, LinkedIn, Rozee, or Glassdoor) and performs basic analysis to showcase **trending technologies, top job roles, most hiring cities, and required skills**.

Key Objectives:

- Build a script using Python (BeautifulSoup, Requests, or Selenium) to scrape job data (title, company, location, skills, and date posted).
- Store the scraped data in a structured format (CSV, JSON, or SQLite).
- Create a simple front-end (using Flask or Streamlit) to display:
    - Top 5 most in-demand job titles
    - Most frequent skills required
    - Cities with the highest number of openings
    - Posting trends over time (based on 'date posted' if available)
- Ensure real-time or scheduled data fetching (run scraper every X minutes or on button click).

Constraints:

- Complete within 18 hours.
- Avoid overloading websites – follow polite scraping practices (respect `robots.txt`, use headers/delays).

- The UI should be minimal but functional (charts using Plotly or Matplotlib are a plus).
- Project should work for at least 100 job listings.

Bonus:

- Allow users to input a keyword (e.g., “Data Analyst”) and display filtered trends based on that.
- Deploy the app on Render, Replit, or any free hosting platform (optional but recommended).