Assignment: -

1. A developer is assigned a task to scrape 1 lakh website pages from a directory site, while scrapping he is facing such hcaptcha, which are placed to stop people from scrapping As a project Coordinator suggest ways to solve this problem

- Use an API if the target website provides that. It's the most legal way.
- Increase wait time between scraping request, do not send mass request to the server.
- Change/rotate IP frequently.
- You can use this plugin called puppeteer-extra-plugin-recaptcha by berstend.Afterwards you can run the browser as usual. It will pick up any captcha on the page and attempt to resolve it. You have to find the submit button which varies from site to site if it exists.

2. Our client has around 10k linkedin people profiles, he wants to know the estimated income range of these profiles. Suggest ways on how to do this?

- By Analyzing the job titles and industries listed on the profiles. Certain job titles and industries tend to have higher average salaries. You can use industry-specific salary surveys to estimate income ranges.
- we can use LinkedIn offers premium features like "LinkedIn Salary Insights." You can encourage your client's connections to subscribe to these features and voluntarily share their salary information.
- we can use machine learning algorithms that predict income based on available profile data. Train the model using profiles with known income data and apply it to the 10,000 profiles for estimation.

3. We have a list of 1L company names, need to find linkedin company links of these profiles, how to go about this?

- we can Start by manually searching for each company name on LinkedIn
- By Utilizing the LinkedIn API, if available. The LinkedIn API allows you to search for companies and retrieve company profile information
- If you have access to LinkedIn Premium, you can use the "Sales Navigator" feature to search for companies and gather their LinkedIn profile links.

4. How to identify list of companies whose tech stack is built on Python. Give names of 5 companies if possible, by your suggested approach

- we can Visit the official websites of companies and review their job postings or career pages. Look for job descriptions that mention Python as a required skill or technology.
- Companies where Python is used (Intel, IBM,Netflix, Facebook, JP Morgan Chase, Spotify)
- tech news articles, industry awards, and rankings where companies are recognized for their technology stacks.

5. Need to find an API, through which we can send linkedin messages to other linkedin users

- you can send messages to other LinkedIn users, you typically have to go through the LinkedIn platform directly by connecting with users, joining relevant groups, or using LinkedIn InMail, which is a paid feature that allows you to send messages to people you are not directly connected with.
- The LinkedIn API provides the /v2/messages endpoint for sending messages.To use the LinkedIn API, you'll need to obtain the appropriate API permissions. This can be done by creating a LinkedIn Developer Account and registering your application.To authenticate the API request, you'll need to use an access token. The access token can be obtained by following the authentication process outlined in the LinkedIn API documentation.