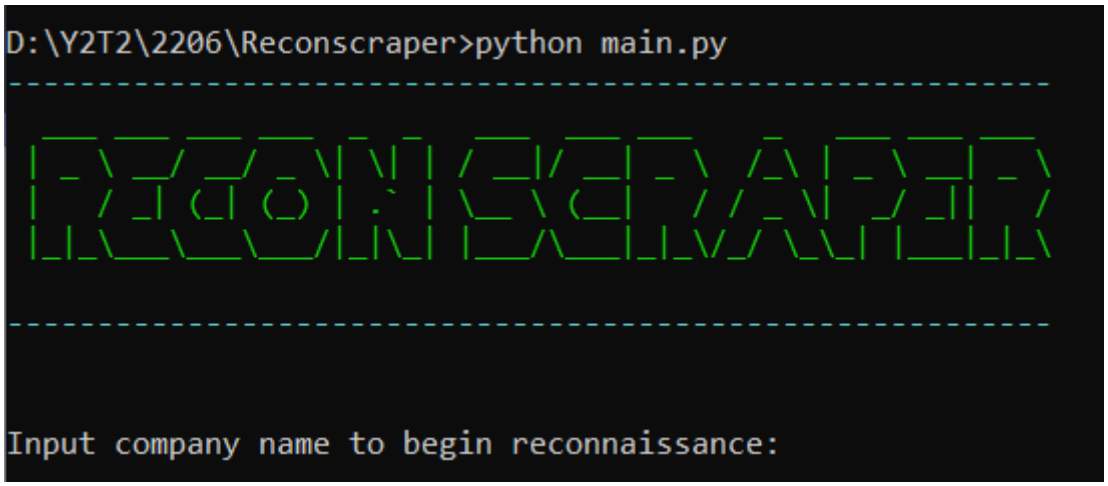
User Manual for Recon Scraper

Step 1: Open the command prompt, go to the main directory of the repository, type

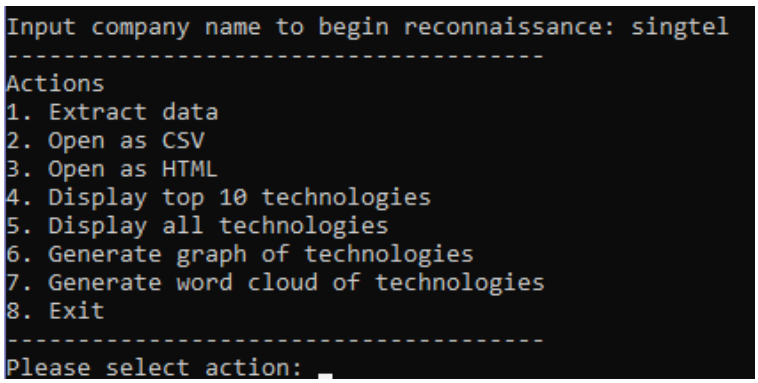
```
python main.py
```



OR using Python IDE: Run main.py

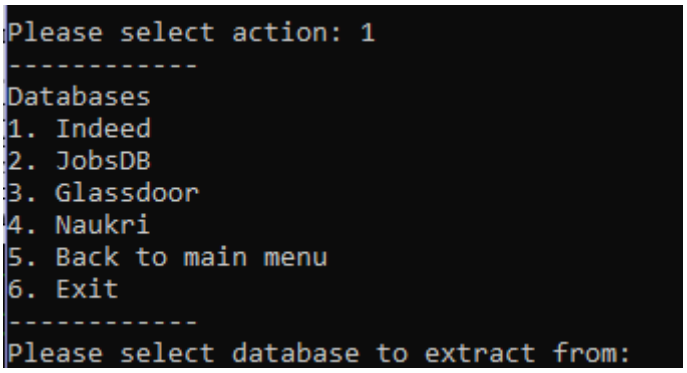
Step 2: Input a company in the program, using '*Singtel*' as an example.

Step 3: Start by extracting the data using option 1.

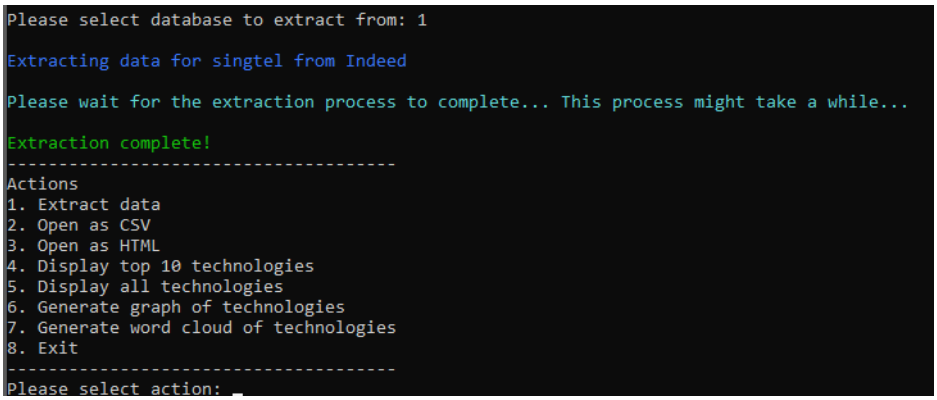


If the user tries options 2-7 before extracting data, there will be an error and the main menu will be reprinted.

Step 4: Choose a database to extract the data from. Using option 1: Indeed for this example.

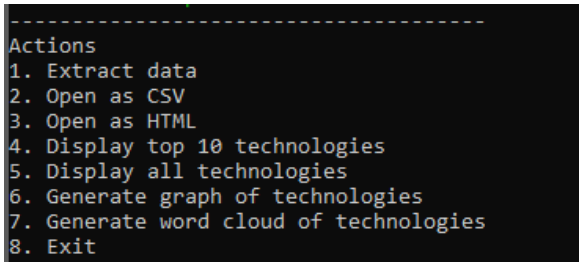


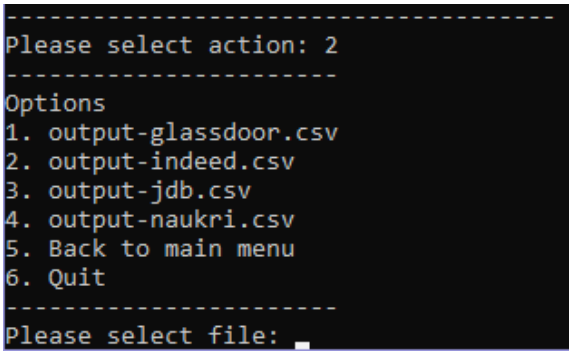
If the extraction is successful, the following message will appear with the other functions for the program.



However, if the search query is unable to find the company, there will be an error message. The user can then try to use other data sources or exit the program and re-enter another company.

Step 5: Choose option 2 to open as CSV format then it shows the list of available files to open.

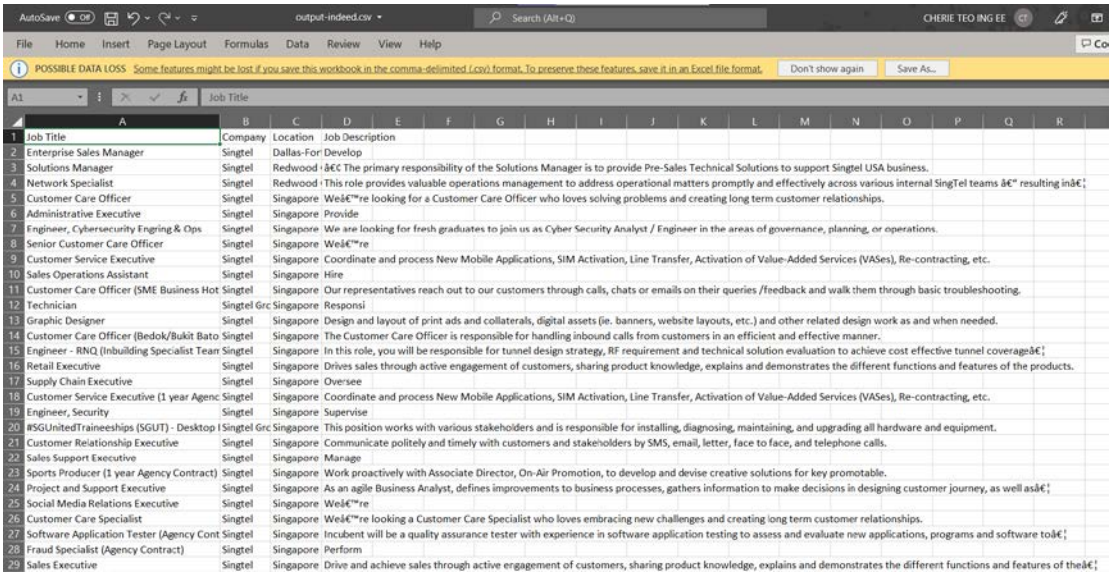




Choose option 2 to open the results as we have chosen to use Indeed database.

```
------------------------
Please select file: 2

output-indeed.csv opened!
----------------------------------------
```

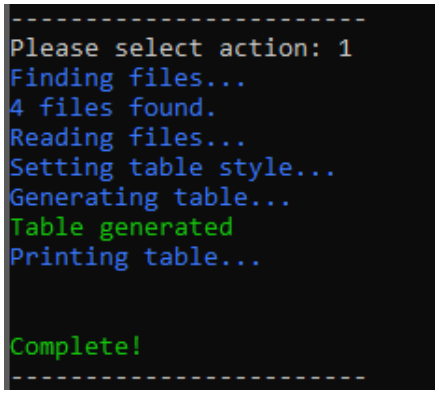


	A	B	C	D
1	Job Title	Company	Location	Job Description
2	Enterprise Sales Manager	Singtel	Dallas-For	Develop
3	Solutions Manager	Singtel	Redwood	â€¢ The primary responsibility of the Solutions Manager is to provide Pre-Sales Technical Solutions to support Singtel USA business.
4	Network Specialist	Singtel	Redwood	This role provides valuable operations management to address operational matters promptly and effectively across various internal SingTel teams â€" resulting inâ€¦
5	Customer Care Officer	Singtel	Singapore	Weâ€™re looking for a Customer Care Officer who loves solving problems and creating long term customer relationships.
6	Administrative Executive	Singtel	Singapore	Provide
7	Engineer, Cybersecurity Engring & Ops	Singtel	Singapore	We are looking for fresh graduates to join us as Cyber Security Analyst / Engineer in the areas of governance, planning, or operations.
8	Senior Customer Care Officer	Singtel	Singapore	Weâ€™re
9	Customer Service Executive	Singtel	Singapore	Coordinate and process New Mobile Applications, SIM Activation, Line Transfer, Activation of Value-Added Services (VASes), Re-contracting, etc.
10	Sales Operations Assistant	Singtel	Singapore	Hire
11	Customer Care Officer (SME Business Hot	Singtel	Singapore	Our representatives reach out to our customers through calls, chats or emails on their queries /feedback and walk them through basic troubleshooting.
12	Technician	Singtel Grc	Singapore	Responsi
13	Graphic Designer	Singtel	Singapore	Design and layout of print ads and collaterals, digital assets (ie. banners, website layouts, etc.) and other related design work as and when needed.
14	Customer Care Officer (Bedok/Bukit Bato	Singtel	Singapore	The Customer Care Officer is responsible for handling inbound calls from customers in an efficient and effective manner.
15	Engineer - RNQ (Inbuilding Specialist Tean	Singtel	Singapore	In this role, you will be responsible for tunnel design strategy, RF requirement and technical solution evaluation to achieve cost effective tunnel coverageâ€¦
16	Retail Executive	Singtel	Singapore	Drives sales through active engagement of customers, sharing product knowledge, explains and demonstrates the different functions and features of the products.
17	Supply Chain Executive	Singtel	Singapore	Oversee
18	Customer Service Executive (1 year Agenc	Singtel	Singapore	Coordinate and process New Mobile Applications, SIM Activation, Line Transfer, Activation of Value-Added Services (VASes), Re-contracting, etc.
19	Engineer, Security	Singtel	Singapore	Supervise
20	#SGUnitedTraineeships (SGUT) - Desktop I	Singtel Grc	Singapore	This position works with various stakeholders and is responsible for installing, diagnosing, maintaining, and upgrading all hardware and equipment.
21	Customer Relationship Executive	Singtel	Singapore	Communicate politely and timely with customers and stakeholders by SMS, email, letter, face to face, and telephone calls.
22	Sales Support Executive	Singtel	Singapore	Manage
23	Sports Producer (1 year Agency Contract)	Singtel	Singapore	Work proactively with Associate Director, On-Air Promotion, to develop and devise creative solutions for key promotable.
24	Project and Support Executive	Singtel	Singapore	As an agile Business Analyst, defines improvements to business processes, gathers information to make decisions in designing customer journey, as well asâ€¦
25	Social Media Relations Executive	Singtel	Singapore	Weâ€™re
26	Customer Care Specialist	Singtel	Singapore	Weâ€™re looking a Customer Care Specialist who loves embracing new challenges and creating long term customer relationships.
27	Software Application Tester (Agency Cont	Singtel	Singapore	Incubent will be a quality assurance tester with experience in software application testing to assess and evaluate new applications, programs and software toâ€¦
28	Fraud Specialist (Agency Contract)	Singtel	Singapore	Perform
29	Sales Executive	Singtel	Singapore	Drive and achieve sales through active engagement of customers, sharing product knowledge, explains and demonstrates the different functions and features of theâ€¦

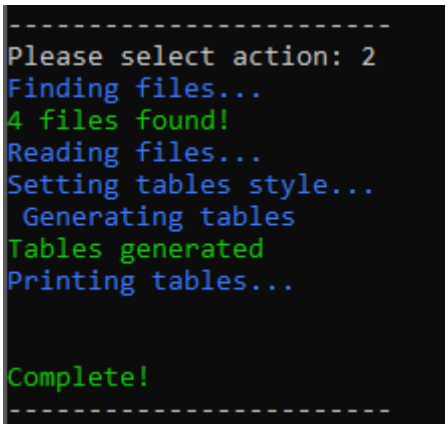
Step 6: Choose option 3 to open the data in HTML format

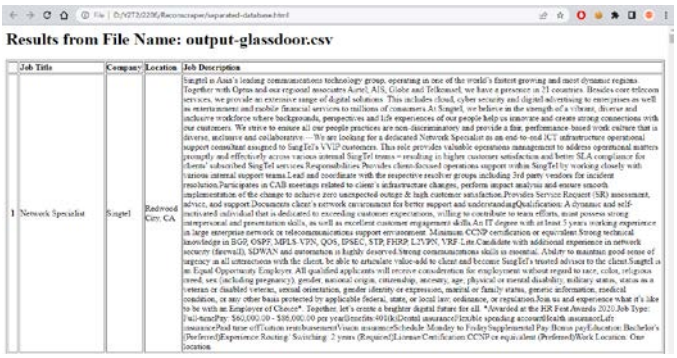
```
----------------------------------------
Actions
1. Extract data
2. Open as CSV
3. Open as HTML
4. Display top 10 technologies
5. Display all technologies
6. Generate graph of technologies
7. Generate word cloud of technologies
8. Exit
----------------------------------------
Please select action: 3
------------------------
Options
1. All-in-One
2. Separated by Database
3. Back to main menu
4. Exit
------------------------
Please select action:
```

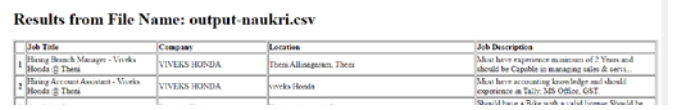
Choosing option 1: All-in-One displays all extracted data into one HTML file and outputs it on the user's web browser.



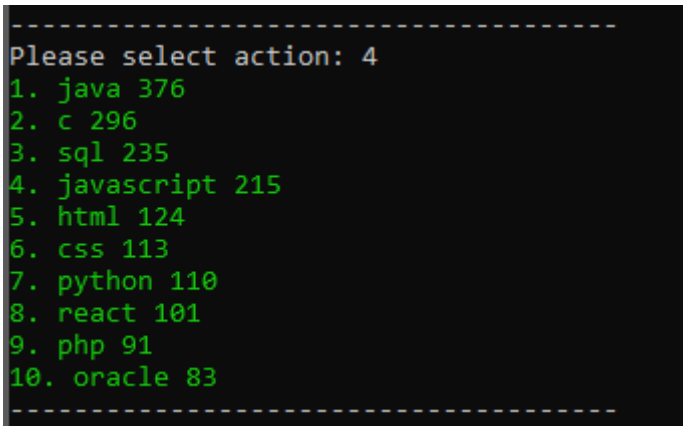
Choosing option 2: Separated by database displays the output as individual databases in the HTML file.



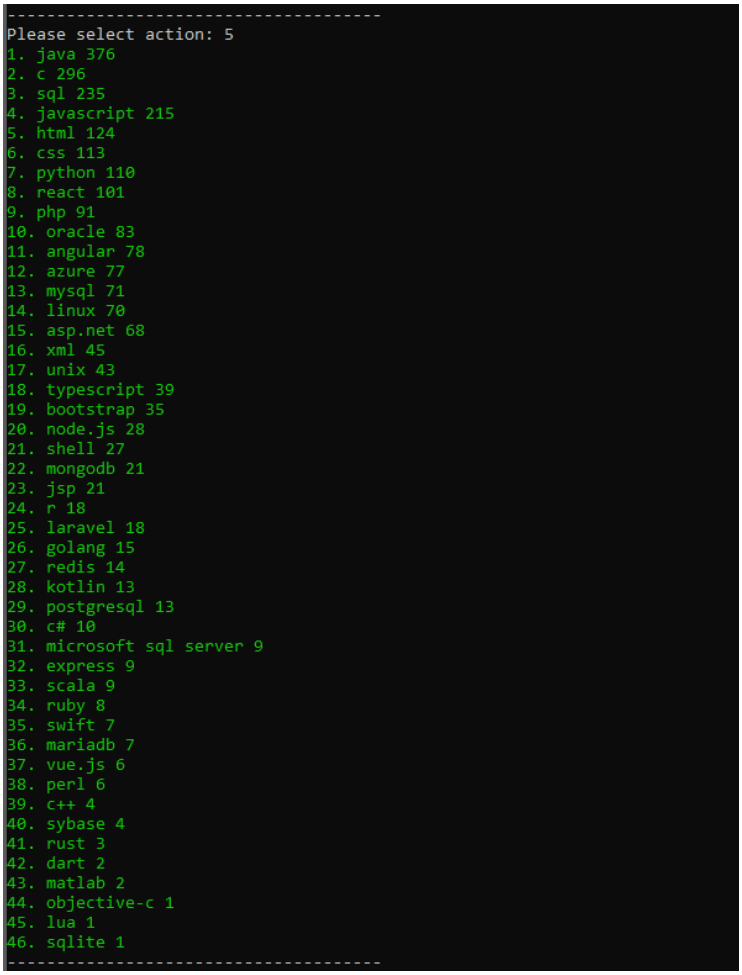




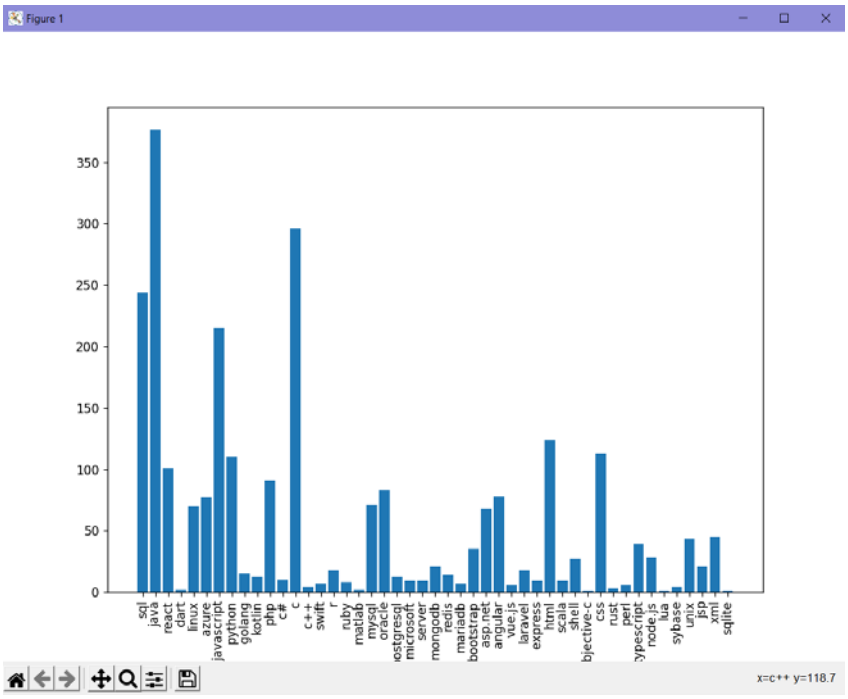
Step 7: Choose option 4 to display the top 10 technologies found during data extraction.



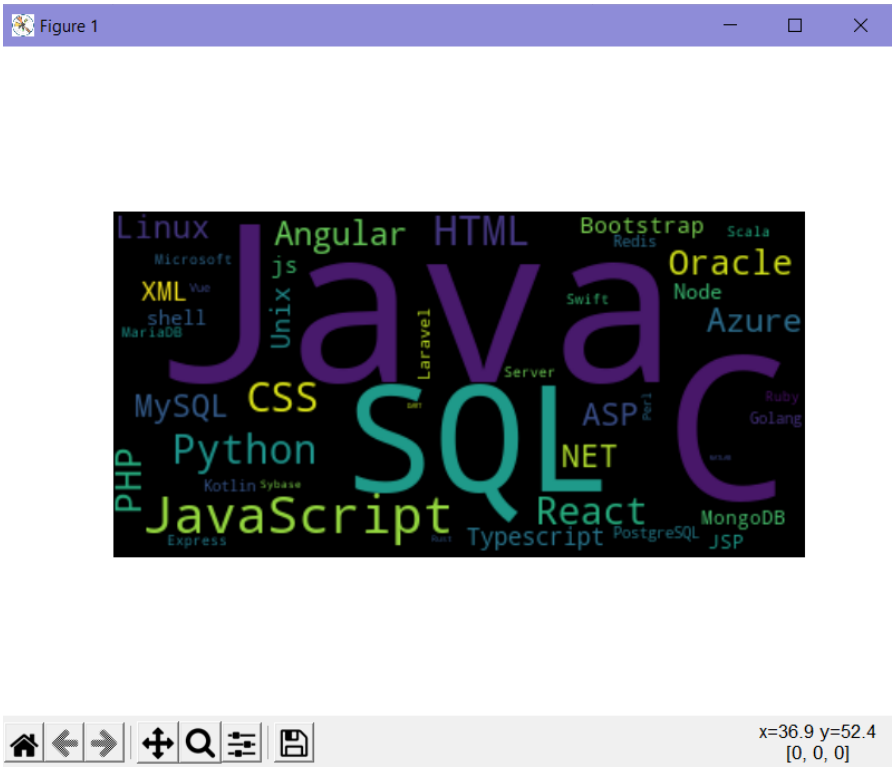
Step 8: Choose option 5 to display technologies that can be found for the company in the technologies.txt file. The frequency of the technologies is counted and arranged in descending order.



Step 9: Choose option 6 to generate the graph of technologies for the visualization of data. The graph can be zoomed in and out and can be saved on the desktop.



Step 10: Choose option 7 to generate a word cloud of technologies as a visual representation of text data. The word cloud can be saved on the desktop as well.



Step 11: Choose option 8 to exit the program gracefully.