

# Task 1

a) Please describe your experience with one of the following areas:

- Python
- SQL
- Wordpress
- Web development
- Data science

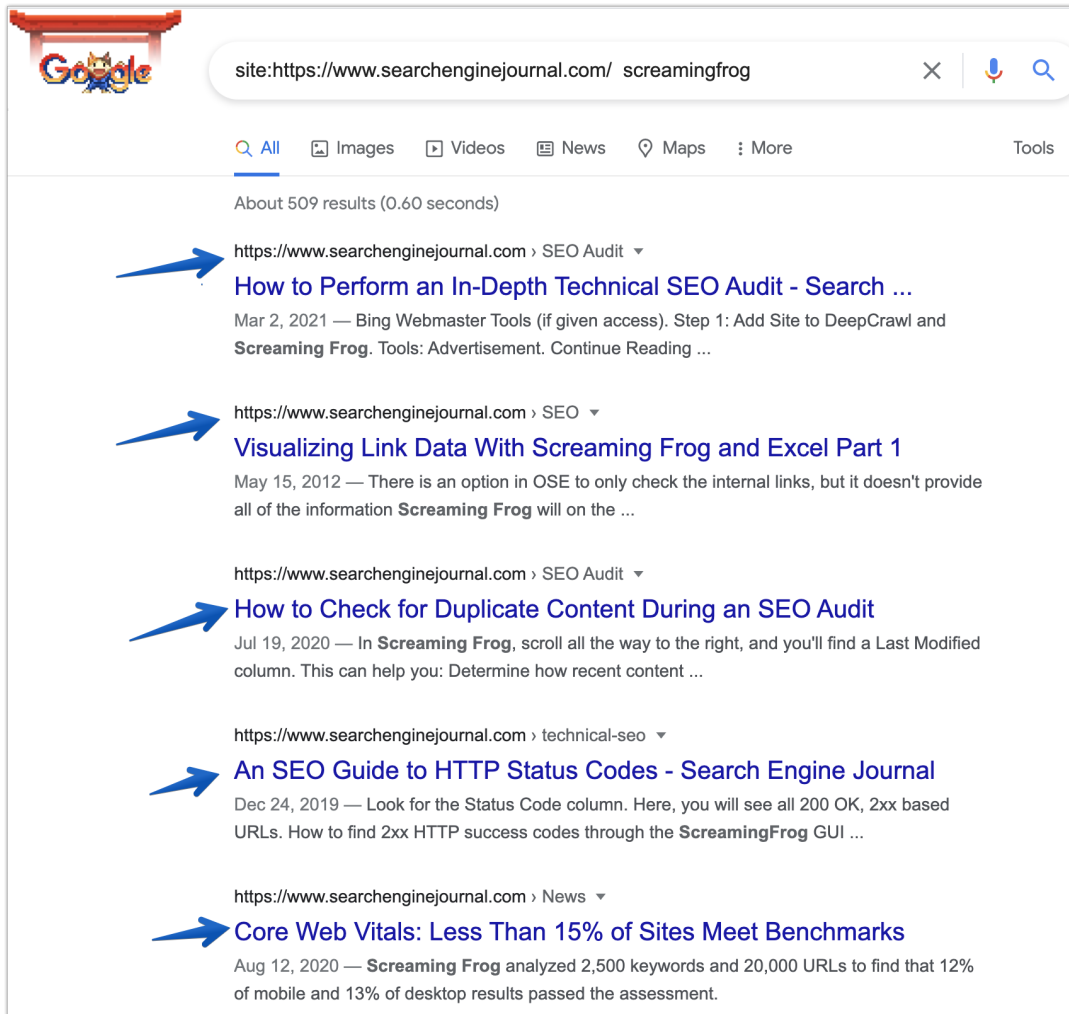
Any projects, GitHub links you can provide are welcome.

## Task 2: scraping the “site” command (optional)

You can use a technology of your choice, but we prefer scripts written in Python as this is the main technology we use in our applications.

Algorithm is as follows:

1. The program is looping through **a list of keywords in the .txt file** (keywords.txt)
2. Then it queries Google.com using the following set of queries:
  - a. **site:**<https://www.searchenginejournal.com/> {keyword}
3. For every query, the program goes through Google Search Results and **extracts all the links pointing to SearchEngineJournal**. We need extractions only from the first page of results but if you can get more, it would be a good addition.
4. We also want **the total number of results** (the number above the first result) to be extracted.



5. The program saves all the links pointing to SearchEngineJournal to a CSV file.
6. The total numbers of results should be saved in a different file along with the associated keyword.

### What's needed?

- Program source code - we don't need a compiled application.
- Short documentation on how the program works (**in English**) including description of functions/classes (this might be added as comments in your code).
- Ideas on how the software can be improved in the future.
- Are there any risks associated with using such a program?
- The program **doesn't need to solve captchas**.

## Task 3: *120 Years of Olympic History data analysis* (optional)

We would like to analyze the dataset containing information about the Olympics.

The dataset is available here:

<https://www.kaggle.com/mysarahmadbhat/120-years-of-olympic-history>

### Questions to answer:

- What countries receive the most medals nowadays? Does it change much across the timespan?
- Who wins the most medals? Women or men?
- What's the trend for the number of participants?
- What is the relation between age and medals won?
- Do tall people win more medals?
- Which sports are dominated by short people? (You must define "short")
- Which families (same surname) win the most medals?

## Requirements:

- Software you use is up to you. You can use Excel, Jupyter Notebook, Tableau, R, Python, MS Power BI or any software of your choice.
- Write a short summary in English.