**AI Documentation (conversations with ChatGPT)**

At the start of the project, I was assigned to work on the task, “Create a gazetteer for the NER” and also mapping the NER. So, I was confused in many of the works. So, I started having conversation with ChatGPT to find clear my doubts and assist me in doing the necessary work.

I asked ChatGPT:

**I am working on a mini project,** **I have done some tasks and now working on the following, please assist me with this task and start with teaching me the basic codes and not the solution and the path I can follow to make this project and also learn. I will also provide you instructions . teach me but not give the solution**

ChatGPT answered:

**Great! You're working on a mini project where one of the key tasks is to build a gazetteer using place names extracted through Named Entity Recognition (NER). You want to learn step by step, not just get the solution—which is the right approach if you're aiming to grow your skills.**

**✅ Task Overview (from your instructions):**

**You have a file called ner\_counts.tsv that contains place names (possibly with counts). Your goal is to:**

**Extract the place names.**

**Geocode them to find latitude and longitude.**

**Write them to a file named NER\_gazetteer.tsv in a folder called gazetteer/.**

**Replace missing coordinates with "NA" and later look them up manually.**

**Document manual lookups in the README.**

**What is a .tsv file?**

**How to read it using Python (csv or pandas).**

**Try printing only the first few rows using a for loop with a break.**

**What is an API?**

**How to use Python's requests library to make API calls.**

**How to extract latitude and longitude from JSON responses.**

**Build and Write to the Gazetteer**

**You now combine the above:**

**Loop through place\_names.**

**Geocode each.**

**Write the results to a new .tsv file with 3 columns: placename, latitude, longitude.**

**I asked ChatGPT: "In the script where I loop through each place name and call get\_coordinates(place\_name), how can I find out which places returned 'NA' values?" ChatGPT replied: "In your current code, you're storing the results of each geocoding call in the coordinates\_data list as dictionaries with keys 'Place', 'Latitude', and 'Longitude'. To identify which places returned 'NA', you can insert a simple if condition right after you append each dictionary. For example, inside your loop, after calling get\_coordinates(place\_name), you could add: if coordinates['latitude'] == 'NA' or coordinates['longitude'] == 'NA': print(f'Manual lookup needed for: {place\_name}'). This will print out any place that failed to geocode correctly, helping you track which ones to manually search for and update in your TSV file later."**