

The most challenging part of this project was learning how best to extract the World Bank data. Because the API extracted based on ISO code *and* WWDI indicator, I needed some way to pass a list of ISO codes, and a list of indicators, to the API request at the same time. In this case I was able to build and update a dictionary as the API pulled the information. I am skeptical that this is the best/most efficient way to pull the data, especially since the piece of API code seems to contribute to most of the execution time.

Another part I struggled with was formatting the web data in order to align its structure with a data frame. Because csv data is already in a tabular format, and I had control of how I extracted my API data, I did not have many issues creating a data frame from those sources. Understanding how to parse the web data was a challenge to me, and I learned how to utilize beautifulsoup for this purpose.

Finally, I learned how to leverage fuzzy matching when joining datasets from multiple sources. This is another piece that I believe may not be the most efficient method, but luckily since my data frames were small prior to joining, I was able to make it work. If I were to use a larger dataset I would look for another method of fuzzy matching that works faster. I thought this was most interesting to me since I am familiar with joining data within a database, but I have never done fuzzy matching.