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DSCI 510 Data for Final Project (Homework 4)

Maintainability

In the scraping program, it's good to use descriptive and clear variable names, but it needs to improve by moving hard-coded values for sleep time between requests and table class names as when the website structure or network conditions change, it's hard to fit well. The API program includes good variable and function naming, clear code structure with separation of concerns, and using comments, but it could be breaking down the long query_api function into smaller functions. The asthma program can be easily extended to process additional input files with the same structure by adding them to the './asthma' directory, and the script will iterate over all files in the directory and process them.

Extensibility

In the Wiki program, the code has good features, such as using separate functions for scraping state and county FIPS codes, but it could only be used in FIPS code which may not be that extensible. It is better to make it a function to scrap Wikipedia with tables. In the API program, the code has good extensible features, such as the use of functions and modules, parameters, and pandas data frames, but it could be improved by avoiding hardcoded values and adding error handling. In the asthma program, the code is easy to read and understand.