Medical Analysis Project

Project Summary

In this Python project, I utilized the Pandas Python library and Numpy to analyze medical data. I created Series and DataFrame objects to store and manipulate the data. The Pandas library provided various built-in functions such as s.max(), s.std(), and s.count() that I used to perform statistical analysis on the data. Additionally, I utilized higher-order functions such as s.map() and df.apply() to apply functions to the data.

To filter the data, I used boolean operators and overloaded functions to perform logical operations on the data. I also used DataFrame filtrations to find patients that match search queries. By slicing and selecting the Series and DataFrame data structures, I was able to access, alter, manipulate, filter, and search the contents of the data.

I standardized the entire data collection using statistical values to ensure the data was consistent and accurate. I used delimiters, which are separators of content while parsing a file, and headers to identify row numbers in the data file. Additionally, I used the name array to define the column names of the data file. To read the data file, I specified the row number count, which determined the number of lines to be read.

Overall, this project demonstrates the power of Pandas and Numpy libraries in analyzing medical data. By utilizing various built-in and higher-order functions, filtering techniques, and statistical analysis, I was able to manipulate and analyze the data efficiently.