1. **Understanding the Problem**: First, I read through the problem statement to understand what needed to be done. It seemed like I needed to analyze some text data to compute various variables like sentiment scores, readability, word counts, etc.
2. **Research and Planning**: I looked into the NLTK library for text processing and Pandas for handling data in Python. I also checked out some tutorials on text analysis to get a better idea of how to approach the task.
3. **Data Preparation**: I wrote functions to read the stop words and positive/negative word files from local folders. Then, I created a function to clean the text data by removing stop words and tokenizing the words.
4. **Text Analysis**: The main part was computing the variables from the text data. I wrote a function to count positive and negative words, calculate sentiment scores, analyze readability, and compute other required variables.
5. **Integration and Testing**: I integrated the text analysis logic into the code and tested it with some sample text data to make sure it was working correctly. I had to debug a few issues related to tokenization and word counting.
6. **Handling Input and Output**: I made sure the code could handle input from local folders where the text files were stored. After computing the variables, I saved the results to an Excel file as specified in the problem statement.
7. **Optimization and Refinement**: I optimized the code to make it more efficient, especially the part where it counted complex words and syllables. I also refined the data processing steps to ensure accuracy.
8. **Documentation and Finalization**: Finally, I added comments and documentation to make the code easy to understand for anyone who might need to review or modify it in the future. After some final testing, I was confident the solution was ready to be submitted.