

Programming Assignment 2: Vowel Count Using String Operation

How I develop my assignment solution

The main purpose of the assignment is to analyze the content of a text file ("Gift_of_Magi.txt") and read the content of the input file and storing it in memory.

In this assignment, I first converted all English letters to uppercase. Then, I count the total number of English characters read from the input file. By writing the modified content to an output file named "result.txt", I printed the first 800 characters of the input text and count the contiguous character sequences based on their length. The most important part in this assignment is counting the occurrences of vowels ('A', 'E', 'I', 'O', 'U') in the input text. Lastly, I output the result.

This assignment dynamically allocates memory for a buffer, aiming to store characters retrieved from an input file named "Gift_of_Magi.txt". The program read characters from the input file, convert them to uppercase if they are English letters, and stores them in the buffer. This proceeds to calculate and print the total count of English characters extracted from the input. Subsequently, the modified content from the buffer is written into an output file named "result.txt". Moreover, the program displays the initial 800 characters of the input text and conducts an analysis to count contiguous character sequences within the text, categorizing them by the length of the consecutive sequence. Finally, I close files and free the allocated memory.