

D1265315 assignment 2

After I define the main function and declare the required variables, I allocate initial memory space for the buffer using the function malloc. And then I open the text file for reading and use a loop to read content character by character from the file into the buffer. During the reading process, if a character is an alphabet, I convert it to uppercase. And then I check if the buffer is full, and if so, dynamically resize it using realloc. At the end of reading, I append a null character to terminate the string. Then, I write the content of the buffer to a file named "result.txt". And then I use a loop to count the number of contiguous characters in the buffer and update the corresponding counters. Furthermore, I use the strpbrk string function to search for vowel characters in the buffer and count their occurrences while updating the respective counters. Finally, I print the statistics for contiguous characters and vowels. Lastly, I free the dynamically allocated memory using the free function.