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CPT187 – C02

Chapter 9 - Program 5

# **REQUIREMENTS**

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| **Date Submitted:** | 3/6/2023 |
| **Application Title:** | Word Frequency Counter |
| **Purpose:** | The program will read text from a file, count the frequency of each word, and print the data to a new file. |
| **Program Procedures:** | Start the program. |
| **Algorithms, Processing, and Conditions:** | 1. String module is imported 2. Program calls main() function. 3. Main calls the get\_paragraph function 4. Function creates file object 5. Function creates empty string for paragraph 6. Each line in the file is concatenated to the paragraph 7. Paragraph is returned 8. Main calls the count\_and\_sort function 9. The text in the paragraph is capitalized 10. The text is sanitized by stripping newline characters and punctuation 11. The text is split on the whitespace 12. An empty dictionary for the counter is created 13. Each word in the paragraph is counted and added to the dictionary using an accumulator 14. A lambda function is used to sort the dictionary based on the keys 15. A new file is opened 16. Each item in the sorted list is printed to the file |
| **Notes and Restrictions:** | text.txt must be in the same file directory. |
| **Comments:** | This program makes use of functions from the string library. |

# **USE CASE**

1. User starts the program
2. Program generates text file.