

# Text File Analysis Project

Program contains 3 different functions. They are:

**main()**: Function that runs the whole project.

**letterFromPosition(int)**: takes integer representation of a letter and return that particular letter.

## Code Operation

- 1) Prompts user for name of text file (including extension of the file, example: test.txt).
- 2) Allocates recommended memory to a variable to hold file content using “malloc”.
- 3) Reads file into the variable (returns “Error: Could not find your file” if not able to read file).
- 4) Scan through file content and store each word into an array.
- 5) During scanning, programs counts:
  - i. The total number of words in file.
  - ii. The total number of characters in the file.
  - iii. Number of times each letter starts different words in the file.
- 6) Programs checks letter that starts most words with the help of the **letterFromPosition** function.
- 7) Finally, program prints the statistics nicely.

## Major Variables

- 1) **fileName**: holds file name taken from user.
- 2) **fileContent**: holds content read from text file.
- 3) **filePointer**: pointer to file.
- 4) **wordCount**: holds total number of words in file.
- 5) **characterCount**: holds total number of characters in file.
- 6) **mostWordStart**: holds letter that starts most words in file.
- 7) **wordStartCount**: holds the count of the letter that starts most words.
- 8) **WordStarterMonitor**: array of how many times each letter starts different words.