This C program performs several operations on a given input text file ("Gift_of_Magi.txt"):

Reading from a File: It opens the input file and reads its content character by character using fgetc().

Filtering and Storing Characters: It filters out non-alphabetic characters and converts all alphabetic characters to uppercase. It stores these characters in a dynamically resizing buffer.

Output Statistics: It calculates and outputs various statistics based on the content of the input file:

Total input English characters.

The number of contiguous letters (single, two, three, and four or more contiguous characters).

The number of occurrences of each vowel.

Writing to an Output File: It writes the filtered and modified text into an output file named "result.txt".

Displaying First 800 Characters: It displays the first 800 characters of the processed text.

Counting Contiguous Letters: It counts the number of contiguous letters (single, two, three, and four or more) in the processed text.

Counting Vowels: It counts the occurrences of vowels (A, E, I, O, U) in the processed text.

Memory Management: It properly frees the dynamically allocated memory before exiting.