

## Problem

I had encounter two main problem. First, I had always been bothered by the fgetc problem. Since fgetc return integral, I was confused about how to use it at the begging. Second, the pointer problem after using fgetc to read the file. The pointer of fgtrln will be moved backward after fgetc being used, so I use the function rewind to move the pointer back to the begging position again so that I can print out the first 800 words correctly.

## How I develop my program

First, define all the variable and the create the memory space. Second, open the file Gift\_of\_Magi.txt with the mode of read. Then, use fgetc, isalpha and toupper to read the file with only alphabet and change the lowercase letter to uppercase letter. Next, reset the pointer of fgtrln with rewind and open another file result.txt with mode w+ and use fwirte to to write buffer into fptrOut. For the fifth step, to print out the first 800 characters and than check and count the number of one character, two contiguous letters, three contiguous and four and more contiguous. Finally, count the number of letter A, E, I, O, U and free the memory.