1. One of the largest obstacles I overcame was figuring out how to read in the file. Although this sounds like the easiest part I had a really hard time with it, for some reason I was not understanding the instructions correctly. Another obstacle I overcame was figuring out how to remove the built-in new lines that were part of the code. At first, I tired removing extra spaces between words but then I noticed the text did not look uniform. After giving up on it for a few hours it occurred to me that there were innate new lines in the text so I filtered them out. At the end after countless hours I still couldn’t figure out the spacing.
2. Code

Fill function:

checks the linelength size if less than 1 it returns 2

repeatedly until end of text file

grabs non space characters

Using helper function isparagraphBreak

if 3 consecutive non spaces checks for paragraph break

if so , checks if there are more consecutive paragraph breaks

issues the correct amount of paragraph breaks

Using helper function containSentenceEnd

checks if words end with period or question mark if so 2 spaces are added

to the word

Using helper function doesWordFitOnthisLine

checks if current word still fits in the line

if it doesn’t it ends that line and starts a new one.

Using the helper function doesWordFitOneLine

checks if at any point any word doesn’t fit into a new line it will return 1 at the end and breaks up the word and keeps going

This will go on until the last character of the text is read.

If every word fit without it being broken up then it will return 0.

1. Text that I used to test the code

1. “Hello this is notatestoradrill seek shelter now “ LINELENGTH= 10

Reason word is longer than LineLength hence 1 should be returned and should be split

2. “Hello this is not a test or drill seek shelter now” LINELENGTH=0

Reason is LINELENGTH is less than 1 hence 0 should be returned.

3. “Hello this is not a test or drill seek shelter now” LINELENGTH=10

This is just a ‘routine test’ no special case just to make sure everything basic works. Should return 2.

4. “Hello this is not a test. This is not a drill. Seek Shelter now!” LINELENGTH=10

Tests if two spaces are printed after a period also makes sure they aren't printed after the exclamation mark or at the end of the line. Should return 2.

5. “Hello, #P# This is not a test #P# This is not a drill, seek shelter” LINELENGTH=10

Tests if it can do paragraph breaks correctly. Should return 2.

6. “Hello, #P##P# this is not a test, this is not a drill. Seek shelter” LINELENGTH=10

Tests if no paragraph break is done although there are consecutive paragraph breaks, should be treated as a word.Should return 2.

7. “Hello this is not a banjo#P#, seek shelter now” LINELENGTH=10

Tests if it will do a paragraph break when it shouldn’t, since banjo#P# is a word, it should not issue a paragraph break. Return 2.

Didn’t pass any test on windows but it passed them on a macbook. Therefore, I cannot say whether it truly failed them or passed them