HW1

Due Feb 22 by 9:30am   **Points** 20   **Submitting** a file upload

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Consider the C library function

```
char * strtok ( char * str, const char * delimiters );

You can read more about this function including sample code regarding using this function at:
http://www.cplusplus.com/reference/cstring/strtok/
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```

In this assignment you will write a C program using strtok to determine the average number of words per sentence in a text string. You will write a function that does the following:

1. uses strtok to tokenize a string containing multiple sentences into individual sentences;

2. uses strtok to tokenize a string containing a sentence into individual words and thus determine the number of words in that sentence ; and

3. correctly calculates the average number of words per sentence.

Not using strtok to tokenize a string will result in a zero grade in this assignment. E.g., you cannot use strtok_r.

Test your code on the preamble of the U.S. declaration of independence: "We hold these truths to be self-evident, that all men are created equal, that they are endowed, by their Creator, with certain unalienable Rights, that among these are Life, Liberty, and the pursuit of Happiness. That to secure these rights, Governments are instituted among Men, deriving their just powers from the consent of the governed, That whenever any Form of Government becomes destructive of these ends, it is the Right of the People to alter or abolish it, and to institute new Government, laying its foundation on such principles, and organizing its powers in such form, as to them shall seem most likely to effect their Safety and Happiness. Prudence, indeed, will dictate that Governments long established should not be changed for light and transient causes; and accordingly all experience hath shewn, that mankind are more disposed to suffer, while evils are sufferable, than to right themselves by abolishing the forms to which they are accustomed. But when a long train of abuses and usurpations, pursuing invariably the same Object, evinces a design to reduce them under absolute Despotism, it is their right, it is their duty, to throw off such Government, and to provide new Guards for their future security." (you can hard-code this string inside your program.)