Testing the Word Count Program

Page 20 of *The C Programming Language* presents a basic version of the `wc` program. Exercise 1-11 asks me to think about two things:

1. How I would test the word count program.
2. The kinds of input that could reveal bugs.

I would test the program by trying specific kinds of inputs that might be unaccounted for or produce strange results given the code's logic. For instance, entering just a newline character or a space character might lead the program to say there is a word when there is not. Also, words like "per se" might be counted as two words, when we typically take them as one idiom. There is also a chance that, because the program starts with the `OUT` state, and then checks for that state in order to increment `nw`, the program might take no words as one word.

Update   I have since used the IN/OUT method in my own program and one potential issue is not being able to handle multiple bits of white space in a row. This is mainly an issue if a program sets the state to IN if the state was OUT. Issues mainly arise with ordering here, I think. Maybe the initial conditional would fix things?