C programming assignment – INI Parser

Please email any source files to

The premise of the project is an INI file parser. Write a simple C program that will read in the attached [Test.ini] INI file, and compare it to a pre-generated list of tags [In the file "List of Valid Sections and Tags.txt, you are free to hard code these into your code if you wish]. Parse and the store the values in a sensible fashion so the program can easily access the value of the tags without having to re-parse the file. Afterwards, print out a status that states the following.

1. Total Number of Tags Parsed from test.ini,
2. Total Number of Sections with at least 1 tag parsed,
3. Any errors,
4. Print a list of all parsed tags along with their values in their respective sections, using the order given in the list of valid section and tags file.

The project should ideally compile, but we want a good way to gauge how you write code in genera. The only requirement is that you use write the program in C. Feel free to use any functions from the standard c libraries.

INI files is a very basic file structure.

❖ Essentially, each "tag" in an INI file has a name and a value, which is separated by an equals sign. For example: Name=Chao Yang, where the "tag" is Name and the "value" is Chao Yang.
❖ Tags are all arranged in arbitrarily named groups called "sections", which are surrounded by brackets. For example: [Personal Information]
❖ There are also comments, which are preceded by a semi colon, and stop at the end of a line. Comments may begin after a tag or section declaration (i.e. be at the end of the same line). They should be ignored.

You are free to make any other assumptions (I.E. If you want to use New Lines as delimiters, or if you want to set maximum value and name lengths, etc).

Please write any edge cases you can think of as you work on the problem.