Lab 7: Counting the articles in a text file

For this lab, you will write a program which counts the number of occurrences of the word "the" in a text file. A text file is provided on the website as lab7file.txt.

The split method of the string class can do most of the work for you. Consider the following:

```
>>> astring = "This is a string with many words."
>>> astring.split()
['This', 'is', 'a', 'string', 'with', 'many', 'words.']
```

By using split, the string is changed into a list of words. At this point, it is possible to iterate through the words, like this:

```
>>> for word in astring.split():
...     print(word)
...
This
is
a
string
with
many
words.
```

An accumulator can be used to count the occurrences of a particular word, in this case `the`. Remember to account for capitalized instances of the word, as occur at the beginning of a sentence! The easy way to do this is to convert words to either lower or upper case before checking to see if they are `the`. This can be done using the `upper()` or `lower()` methods. For example:

```
>>> "The the THE".lower()
'the the the'
```

Words can be converted to upper or lower individually after splitting the string, or the entire string can be converted before splitting.

General plan for the program:

```
Ask the user for a filename (you can hardcode the filename if you prefer)
Open the file and read the contents into a string
split the string (save the results in a different variable)

set the count to 0
for each word:
    if the word is "the":
     increase the count by 1

print the final count
```