CENG 112 - LAB 4

In this lab, you will examine the text called Alice's Adventures in Wonder Land written by Lewis Caroll.

1. It is a large text file and it should be read and examined according to the line, word, characters, and each character in the alphabet. Before going further, especially in Natural Language Processing, you need to know how to implement and count specific types of statistics that are related to a text file. A sample output can be seen below, and the output of your program should be similar to this.

```
Enter a filename: alice29.txt
lines: 3609
words: 26458
characters: 144873
a appears 8787 times
b appears 1474 times
c appears 2397 times
d appears 4931 times
e appears 13569 times
f appears 2000 times
g appears 2528 times
h appears 7372 times
i appears 7511 times
j appears 146 times
k appears 1158 times
l appears 4713 times
m appears 2107 times
n appears 7013 times
o appears 8141 times
p appears 1522 times
q appears 209 times
r appears 5433 times
s appears 6495 times
t appears 10684 times
u appears 3468 times
v appears 845 times
w appears 2674 times
x appears 148 times
y appears 2264 times
z appears 78 times
```

To achieve this implementation, you need to include file processing to read the file without any errors. Exception handling can be used to implement while opening and reading the file (not mandatory). While counting the occurrences of the characters in the alphabet you need to store characters as an array and Unicode point value casting should be used. The input file (alice29.txt) is given in Moodle.

Good Luck.