

Sultan Qaboos University
College of Science
Department of Computer Science
COMP2002, SPRING 2013
Assignment No. 3
Due Date: Sunday 8/12/ 2013 (11:55pm)

- Write your name, ID number and section on your submitted solution file.
- Name your solution files as **hw3_Sec**_*****.cpp**, where ** and ***** are your SECTION and student ID number respectively.

Write a program which prints a table listing the number of occurrences of the lower-case characters 'a' to 'z' in the file "text.cpp". (Save your program in a file of this name so that you can test it on itself.)

Write a C++ program which does the following:

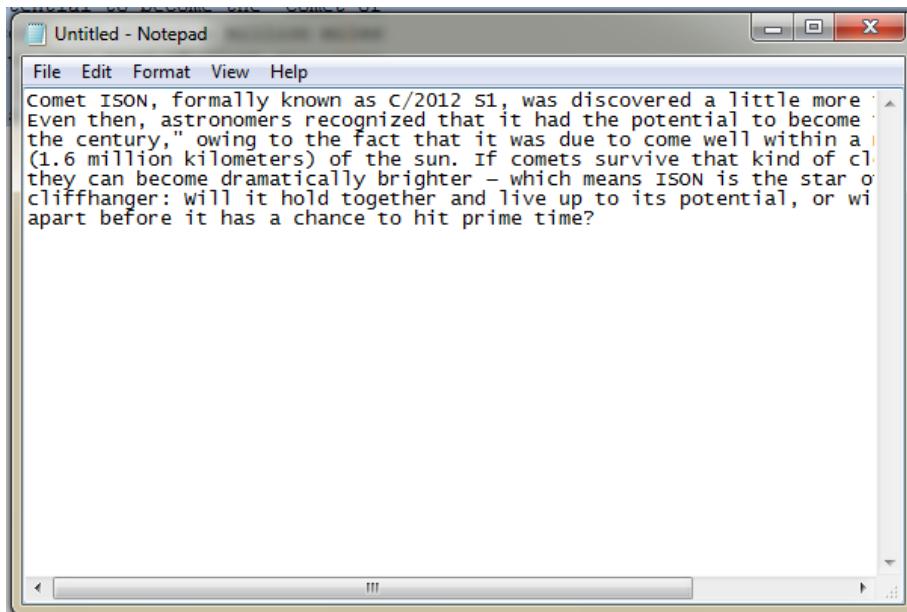
1. Reads the text from text file (see *text.txt*).
2. Ignore any non-alphabet (ex: digit, special character)
3. Convert any upper character format to lower character format.
4. Count the occurrence of each letter.
5. The program should produce output such as the following:

Output

CHARACTER	OCCURRENCES
a	34
b	5
c	17
d	9
e	50
f	10
g	6
h	23
i	33
j	0
k	4
l	25
m	17
n	23
o	35
p	5
q	0
r	23
s	17
t	49
u	6
v	5
w	8
x	0
y	5
z	1

RUN SUCCESSFUL (total time: 84ms)

Input file (text.txt)



Comet ISON, formally known as C/2012 S1, was discovered a little more than a year ago. Even then, astronomers recognized that it had the potential to become "the comet of the century," owing to the fact that it was due to come well within a few million kilometers (1.6 million kilometers) of the sun. If comets survive that kind of close encounter, they can become dramatically brighter – which means ISON is the star of a major cliffhanger: will it hold together and live up to its potential, or will it break apart before it has a chance to hit prime time?

Grading Table:

Attributes	0	0.5	1	2
Style (comments, variable naming, indentation)				
Declarations				
Opening and closing file				
Usage of loops				
Use of selection statements				
Convert upper case to lower case				
Skipping non alphabets.				
Reading from file				
Compute the occurrence of each char				
Compilation errors				
Execution errors				
Correct output format				
Total				