



BIRZEIT UNIVERSITY

Computer Science Department

COMP133 (Second Semester 2020/2021)

Assignment # 3 Due Date: Tuesday(25/5/2021) 11:59 PM on *Ritaj Only*

Notes:

1. Submit your assignment (main.c File) through Ritaj only by replying on a message called **Assignment 3 solution** .
2. The assignment should be submitted on the due date, late submission will NOT be accepted for any reason.
3. The assignment is individual effort. Copying the assignment will be treated as a cheating attempt, which may lead to fail the course.

(Late Assignments will not be accepted for any reason)

Counting the character occurrences in a file

For this task you are asked to write a program that will open a file called “story.txt” and count the number of occurrences of each letter from the alphabet in this file.

At the end your program will output the following report:

Number of occurrences for the alphabets:

a was used – times.

b was used – times.

c was used – times.... ..and so, on

Assume the file contains only lower-case letters and for simplicity just a single paragraph. Your program should keep a counter associated with each letter of the alphabet (26 counters) **[Hint: Use array]**

Your program should also print a histogram of characters count by adding a new function print Histogram (int counters []). This function receives the counters from the previous task and instead of printing the number of times each character was used, prints a histogram of the counters. An example histogram for three letters is shown below) **[Hint: Use the extended ascii character 254]**:

C:\WINDOWS\system32\cmd.exe

```
a #####
b ####
c #####
Press any key to continue . . .
```