Project 1: Compute the frequencies of characters in a given input file.

(Ignore all tabs, spaces and line returns)

Please note:

(1) You may NOT hard code the input and output file names in your program,

you will get -2 pts for doing so!!!

(2) Your on-line submission MUST follow the on-line submission specs, including the subject heading in your email submission and the name of your Java/C++ code.

(3) Your hard copy submission MUST follow the hard copy submission specs.

// Since you are all expert in Java, so, it should take no more than an hour of two to do this project.

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Project points: 8

Language: Java

Due date: Soft copy: 9/02/2019 Monday before Midnight

-1 pt for one day late : 9/03/2019 before Midnight

-3 pt for two days late : 9/04/2019 before Midnight

Due date: Hard copy: 9/03/2019 Tuesday in class

Since there is no class on 9/04 Thursday,

all late hard copies need to place under office (A218) door by 9/05.

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I. InFile: a txt file (use argc[0])

II. OutFile: a txt file (use argc[1]) with the following format:

\*\*\*\* >>>(DO NOT print any characters that have zero count.)

char1 count

char2 count

char3 count

char4 count

:

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III. Data structure:

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- charIn (char)

- index (int)

- charCounts[256]

a 1D array where 256 is max number of different asci characters.

- printAry ()

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VI. main(. . .)

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step 0: inFile 🡨 open input file

outFile 🡨 open output file

- initialize charCounts array to zero.

step 1: charIn <- get the next character from inFile, **one character at a time**

step 2: index <- cast charIn to integer

step 3: charCounts[index]++

step 4: repeat step 1 to step 3 while inFile is not empty

step 5: printAry () // Print the charCounts array according to the format

// given in the above.

step 6: close all files