Project 1

Comp 122/L Spring 2019

Write a program in ARM using ARMSim# to perform the following tasks:

* Open a file named "integers.txt" and read the first integer value, x, in the file.
* Continue reading more integers from the file until you reach an end-of-file. As you read integers, keep track of the following information.
  + the total number of integers in the file
  + the number of integers greater than x in the file
  + the maximum positive integer value in the file
* Finally, output the four pieces of information to the console (*stdout*):
  + the total number of values in the file, including the first value
  + the first value, x, read
  + the number of values in the file greater than x but not including X
  + the maximum positive integer value in the file

For example, if "integers.txt" contains the integers

**"0 5 134 -10 -34 77 122 6 -654 20 7 200"**

I would expect the most basic output to be:

**"12 0 8 200"**

Meeting the above requirements is a bare minimum for the assignment or 75%. In order to get full (maximum) credit, your program should:

1. Have appropriate comments (not too much and not too little) in the source code.
2. Check for errors, such as a missing file or an empty file.
3. Have readable output messages displayed on the *stdout* (e.g. " ***File contains 12 integers, First integer x is 0***, ***There are 8 integers greater than 0*** and ***The maximum positive integer is 200***.") instead of just the raw values.

Please submit a single file called "project1.s" to the Assignment on Canvas.