Alexandria University
Faculty of Engineering
Computer and Systems Engineering Dept.
Second Year

CS222: Systems Programming
Spring 2019
Lab 1

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Write a sequence of instructions for SIC/XE machine that does the following:

a. Set ALPHA equal to the integer portion of BETA / GAMMA.
b. Set ALPHA equal to 4 * BETA + 3 * GAMMA
c. Clear a 100-byte string to all blanks
d. SET elements of a 100-word array to 0
e. Read a string from device F3, calculate its length and store it in register A
f. Read a two-digit number from device F3, convert this string to a number and store the number in register A

Notes:

- Use the assembler and simulator to assemble and run your programs.
- Test your programs properly and submit a report that contains your source code and sample runs. Also, state your assumptions clearly (if any).
- The sample runs should be clear and cover several cases in each question.
- There will be no discussion for this lab. Instead, the lab period will be for taking questions about SIC tools, SIC instructions, lab problems … etc.
- Since there is no discussion, the grade will depend totally on your report. So make sure you prepare a good report.