



Lab 1

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 $4 * \text{BETA} + 3 * \text{GAMMA}$
- 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.
- Since there is no discussion, the grade will depend totally on your report. So make sure you prepare a good report.