CS 10

Lab #2

Write a program that inputs a 4x4 matrix of **single-digit** integers **one row** at a time (one row per input line – not one number per line!) and stores it into a linear 32-bit **Integer Array** M (so called Row-Major order). It is not completely trivial to do this given the Syscalls available and the desired input format. Hint: Format conversion will be required (do not use syscalls for the format conversion, just use loads, math and stores).

Print the matrix back out with each **row on a separate line and the values separated by spaces**. Make this program a procedure so that you can use it again in later labs. For now you can call it from a very simple main routine that just calls the routine.

When you run the program, the input should look something like

Input row 1: 1 4 3 2
Input row 2: 5 7 6 8
Input row 3: 9 1 2 3
Input row 4: 4 5 6 7

Where the integers 1 2 3 4 … 8 9 or whatever matrix values the user wants to input are input by the user on the "console."

And the output will look like

Row 1: 1 4 3 2
Row 2: 5 7 6 8
Row 3: 9 1 2 3
Row 4: 4 5 6 7

Send the program to me in runable form.