CS 245 Fall 2016
Assignment 1 – Working with arrays, ands and ors

For all assignments, be sure to:
- Include file comments at the top, listing your name, the name of the program, and briefly describe what the program does.
- Describe the register conventions.
- Line up instruction parts in columns: 0=labels; 1tab=opcode (instruction mnemonic); 2tabs=operands; 3-4tabs=comments.
- Include pseudo-code comments to the right of your assembly code. **Avoid** comments that tell me what the assembly does, such as: move 25 to register $s3 – I already know this. Keep your comments to the logic.

HINT: You may want to use other Syscalls than what are listed in my lecture notes (e.g., to print in hexadecimal or print a character.) See this web page to find the appropriate syscall to use: http://courses.missouristate.edu/KenVollmar/mars/Help/SyscallHelp.html.

Program 1A: Anding and Orring Elements
In this assignment, perform the following operation and print its results:
```
Example:
    0x25 & 0xf0 | 0x13 = <your answer>
```
The numbers used in this program can be hardcoded, except of course that the answer should be calculated.

Program 1B: Fetching an Array Element
In this assignment, you will define an asciiz byte array with a string of characters: your choice of text. Prompt for a number, then use that number as an array index into the string. Print the character at that location. An example sequence is (assuming the first character is character 0):

```
Example: (assumes string: .asciiz  "abcdefg")
     Enter array element: 2
     Output: c
```

Submission
Turn this program in as homework 1 **via paper and electronic copy**. To submit the electronic copy, on a CS lab linux machine execute the following commands:
```
$ submit 245 homework1a.asm
$ submit 245 homework1b.asm
```

Grading
Each homework assignment is worth 10 points total. Be careful to include all comments and format correctly, as directed in the beginning of this file.