

ECED 3204 Microprocessor

Assignment #2

<http://www.jasongu.org/3204/assignments.html>

Due date: September 27 2017. Late submission will not be accepted.

Assignment #2 contains the following problems:

E3.3 Invoke the SetPointer macro defined following to load the address 0x3000 into Y register.

```
.macro SetPointer  
ldi @0, low(@2)  
ldi @1, high(@2)  
.endmacro
```

E3.7 Write a program to subtract the 16 bit number stored at 0x200-0x201 from the 16 bit number stored at 0x202-0x203, and stored the difference at 0x204-0x205.

E3.11 Write a program to swap the upper 4 bit with the lower 4 bits of every element of an array of 8-bit integers. The initial array is stored in the program memory and you must copy this array to the data memory for testing purpose.

E3.15 Write program to set the bit 7 and bit 0 of all the elements of an array to 1.

E3.19 Write a program to copy a block of memory locations from one area to another area in data memory.