

ECE 3724/CS 3124 Homework #1

This homework refers to the SSN processor discussed in Lecture #1 (EE 3724 Introduction).

1. Write and assemble a program for the SSN processor based upon YOUR Student ID number.

Your Student ID number: _____

Mem Location	Mem Contents	Instruction
00		
01		
02		
03		
04		
05		
06		
07		
08		
09		
0A		
0B		
0C		
0D		
0E		
0F		

2. Disassemble the program below. Give the number sequence for ODD = 1, and ODD = 0.

Mem Location	Mem Contents	Instruction
00	01 0011	
01	10 0010	
02	00 0100	
03	10 0011	
04	01 0111	
05	10 0110	
06	00 1000	
07	10 0111	
08	01 1011	
09	10 0000	
0A	00 0000	
0B	10 0101	
0C	00 0000	

3. What HARDWARE changes are required to the architecture of the SSN processor if I wanted to be able to write a program that had a maximum of 32 instructions in it? Show your work.