CSE 232

Systems Programming

2017 Spring

Assignment 3
Last Submission Time: 12.3.2017, 23:45

Purpose of This Assignment

The purpose of this Assignment is to teach you how to write an M6800 assembly language program for implementing arrays using index register.

- You will build your implementation using your code for previous assignment.
- In Assignment 2, the binary number contained only 1's. This time, it can be composed of 1's and 0's.
- The bits of the binary number will be provided in sequential memory addresses as an array. Traversing this array with index register, you will compute the hexadecimal number, which corresponds to the input bits. An example input-output pair is given in Table 1, where input array starts from 100H. If this array contains the binary number 10110, the result should be 16H, which is stored in 120H.
- At the beginning of your code, use load and store instructions to place the input bits in the given memory addresses. The array size is fixed for this assignment.

Memory addresses for input array	100H	101H	102H	103H	104H
Input bits	01	00	01	01	00
Memory address for output	120H				
Output (result)	16H				

Table 1. An example input-output pair

SUBMISSION

Enroll the CSE 232 COADSYS page if you haven't done yet. Submit your assignment with the name "**nameLastNameID_assignment3.asm**" using COADSYS.