CSE 232

Systems Programming

2017 Spring

Labwork Assignment 5
Last Submission Time: End of lab hour

Purpose of This Labwork

The purpose of this experiment is to have experience with the **subroutine** structure in M6800 assembly language together with the **index register** and **time delays**.

---

1. Write a M6800 assembly language program that implements the following C program with arrays:

    ```
    int A[]={5,3,8,18,2};
    int B[5];
    int i;
    for(i=0;i<5;i++)
    {
         B[i]=A[i]+1;
    }
    ```

    Place your code in the memory starting from address 100H. Starting addresses of the input and output arrays are 20H and 30H respectively.

2. You are given the following delay subroutine:

DELAY	STX	$40
	LDX	#100
DEL2	DEX	
	CPX	#0
	BGT	DEL2
	LDX	$40
	RTS	

Invoke this subroutine in each iteration of the loop in Step 1. When you execute your code, you should be able to observe that each element is written to the output array after the amount of time expires as specified in the delay subroutine.

SUBMISSION

Enroll the CSE 232 COADSYS page if you haven't done yet. Save your labwork as "**nameLastNameID.asm**", prior to submission using COADSYS.