

CSE 232

Systems Programming

2017 Spring

Labwork Assignment 4

Last Submission Time: End of lab hour

Purpose of This Labwork

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

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

```
int A[]={17,5,8,12,4,10};
int B[6];
int i;
for(i=0;i<6;i++)
{
    if(A[i]%2==0)
    {
        B[i]=A[i]/2;
    }else{
        B[i]=A[i]*2;
    }
}
```

In order to place the values in memory, use load and store instructions at the beginning of your code. Initially store the contents of A to the memory addresses **100H-105H**. After your program executes results must be stored in memory addresses **120H-125H**.

SUBMISSION

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