## Midterm 2 ECE 2560 Spring 2017

Create an array in RAM named **Numbers** with the following 16bit wide elements:

-2000, -1000, -550, -450, -400, -600, -1600, -1400, -2500, 500, -1250, 250, -2000, -1100, -1400, -100

Create a 16bit wide variable in RAM with the name Average

Write an assembly language program which calculates the average of all the elements of the array and stores the average value in the variable named **Average**.

Use loops for all repeated tasks. Include pseudo code and flow charts and your CCS assembly file (.asm format) in your package. Include screen shots of the CCS memory browser which show the elements of the array in RAM as well as the variable "Average" in ROM clearly showing the average value of the array stored in it.