Name: Id#

COE 306, Term 171

Introduction to Embedded Systems

Quiz# 2

Date: Tuesday, Oct. 24, 2017

# **Q1.** Consider the C code given below:

**volatile** **static** **int** Array[10] = {75,20,50,40,55,60,10,85,100,90};

**int** Max=Array[0];

**int** Min=Array[0];

**for** (**int** i=1; i<10; i++)

**if** (Array[i]<Min)

Min = Array[i];

**else if** (Array[i] > Max)

Max = Array[i];

Implement the given C code using minimum number of ARM assembly instructions.

# 

# **Q2.** Determine the content of register 0x27 after executing the following PIC16F assembly code:

MOVLW 0xA7

MOVWF 0x25

MOVLW 4

MOVWF 0x26

CLRF 0x27

NEXT MOVF 0x25, w

ANDLW 3

ADDWF 0x27, f

RRF 0x25, f

RRF 0x25, f

DECFSZ 0x26

GOTO NEXT