Name: Id#

COE 306, Term 161

Introduction to Embedded Systems

Quiz# 2

 Date: Thursday, Oct. 20, 2016

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

**volatile** **static** **int** Array[10] = {10,20,30,40,50,60,70,80,90,100};

**int** Temp;

 **for** (**int** i=0; i<9; i++)

 **if** (Array[i]<Array[i+1]){

 Temp = Array[i];

 Array[i] = Array[i+1];

 Array[i+1] = Temp;

 }

 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 0x9D

MOVWF 0x25

MOVLW 8

MOVWF 0x26

CLRF 0x27

NEXT BTFSC 0x25, 0

INCF 0x27, f

RRF 0x25, f

DECFSZ 0x26

GOTO NEXT