

Haseeb Tariq

232506

Computer Organization an Assembly Language

Question 1

Code: INCLUDE Irvine32.Inc

.data

readings BYTE 1, 10, 18, 24, 55, 66, 67, 68, 69, 73

threshold BYTE 70

maximumValue BYTE ?

warnmsg BYTE "caution!!: Sensor reading has exceeded threshold. Increased Value is: ", 0

.code

main PROC

mov esi, OFFSET readings

mov ecx, LENGTHOF readings

xor eax, eax

findMaximum:

mov bl, [esi]

cmp bl, al

jbe skip

mov al, bl

skip:

inc esi

loop findMaximum

mov maximumValue, al

cmp al, threshold

jbe done

mov edx, OFFSET warnmsg

call WriteString

call WriteInt

done:

exit

main ENDP

END main Output:

Question 2: