



# Case Western Reserve University

## Department of Computer and Data Sciences

### EECS 349&444: Computer Security

Assignment Date:	10/15/2019
Submission Date:	10/18/2019@9:59am
First Name:	
Last Name:	
Google Drive Link:	
Abstract of the feedback:	

\* This is the part of Q2 and Q3 for HW2 which contains 20 points (10/pts per question). You are encouraged to finish independently. Any submitted work that is copied from any source or too similar to be an independent write-up will not be given credit. Please submit your solutions along with your detailed analysis for each line of code (e-copy) on Canvas by 9:59am on 10/18/2019.

## HW-2: Assembly Code Analysis

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### Q2: Functionality?

```
• DATA SEGMENT
X DB 25
Y DB 32
Z DW ?
DATA ENDS

CODE SEGMENT
    ASSUME CS:CODE,DS:DATA
START: MOV AX,DATA
    MOV DS,AX
    MOV AL,X
    MUL AL
    MOV BX,0
    MOV BL,Y
    ADD BL,BL
    ADC BH,0
    ADD BL,Y
    ADC BH,0
    SUB AX,BX
    SHR AX,1
    MOV Z,AX
    MOV AH,4CH
    INT 21H
CODE ENDS
END START
```

### Q3: Functionality?

```
.data
array dd 34,12,3,18
szMsg db "%d",0ah,0

.code
start:
    mov ecx,3
L2:
    push ecx
    xor esi,esi
    mov ecx,3

L0:
    mov ebx,array[esi]
    cmp ebx,array[esi+4]
    jb L1
    xchg ebx,array[esi+4]
    mov array[esi],ebx
    add esi,4

L1:
    loop L0
    pop ecx
    loop L2
    xor esi,esi
    mov ecx,4

L3:
    push ecx
    invoke printf,offset szMsg,array[esi]
    add esi,4
    pop ecx
    loop L3
    ret
end start
```