1082 Assembly Language week 11HW

Student ID：_____ ， Name：_____

Ch4 Data Transfers, Addressing, and Arithmetic
Objective: Familiar with the Data-Related Operators, Indirect Addressing, and LOOP.

1. **Write down the hexadecimal** value **of each destination operand:**

data
varB BYTE 65h,31h,02h,05h
varW WORD 6543h,1202h
varD DWORD 12345678h
.code
mov ax,WORD PTR [varB+2]   ; a.
mov bl,BYTE PTR varD   ; b.
mov bl,BYTE PTR [varW+2]   ; c.
mov ax,WORD PTR [varD+2]   ; d.
mov eax,DWORD PTR varW   ; e.

Ans.	
a.	AX=
b.	BL=
c.	BL=
d.	AX=
e.	EAX=

2. Using LOOP, MOV, etc. instructions to put values in the ArrayB.
ArrayB's values are set to 8*1, 8*2,…, 8*9.

```
INCLUDE Irvine32.inc

.data
ArrayB byte 9 DUB(?)


.code
main PROC
    mov ecx,_____    ; loop counter
    mov esi, _____   ; address of ArrayB

L1:

    ; Your turn

    loop L1                    ; repeat until ECX = 0


INVOKE ExitProcess, 0
main ENDP
END main
```

※請完成此功能寫出對應的程式碼以及註解,並利用 Debug 模式,觀察程式執行的狀況,並另外截圖說明自己的程式碼執行過程放至 word 中。