LAB 03

Q1

```
EAX = 00EFF841 EBX = 00D39000 ECX =
    EBP = 00EFF7C4 EFL = 00000202
```

194 %

program.asm

```asm
1        INCLUDE Irvine32.inc
2        .data
3           val1 BYTE 'A'
4        .code
5        main PROC
6            mov al , val1
7            call WriteDec
8        exit
9        main ENDP
10       END main
11
```
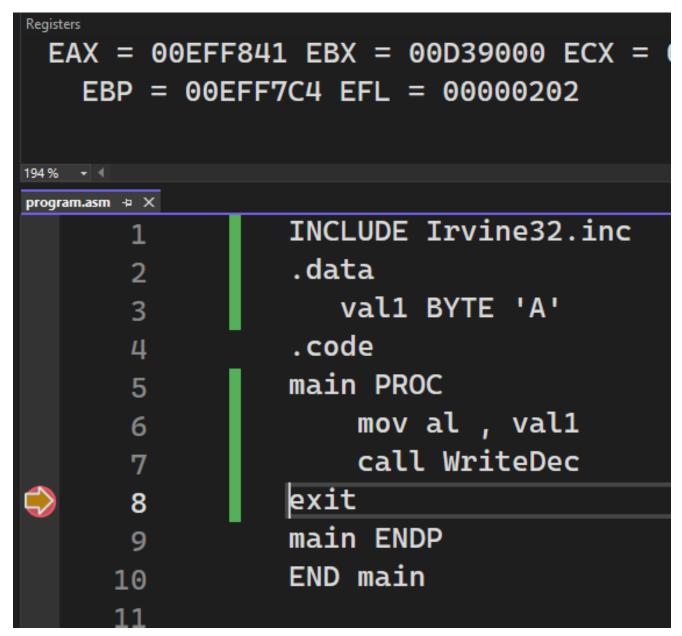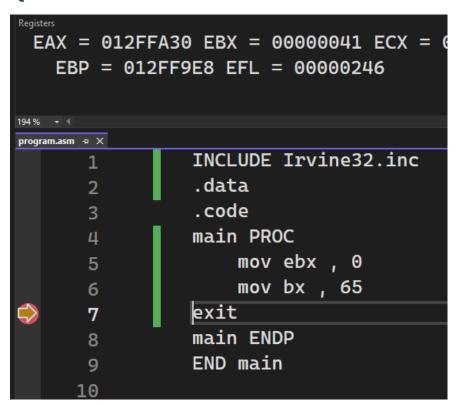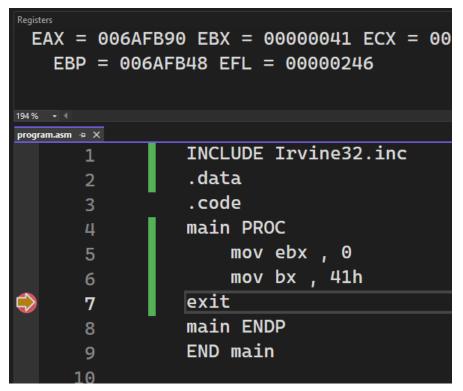
Q2

```
INCLUDE Irvine32.inc
.data
    num1 SBYTE -128
    num2 BYTE 255
    temp BYTE ?
.code
main PROC
exit
main ENDP
END main
```
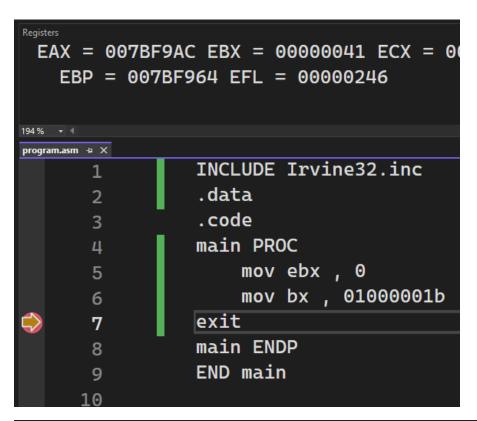
Q3

```
INCLUDE Irvine32.inc
.data
    greeting BYTE "Good Night" , 0
.code
main PROC
exit
main ENDP
END main
```
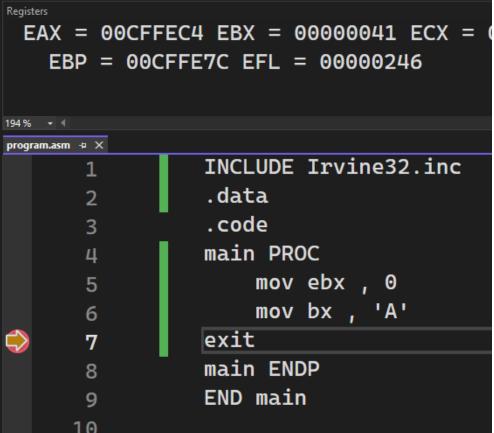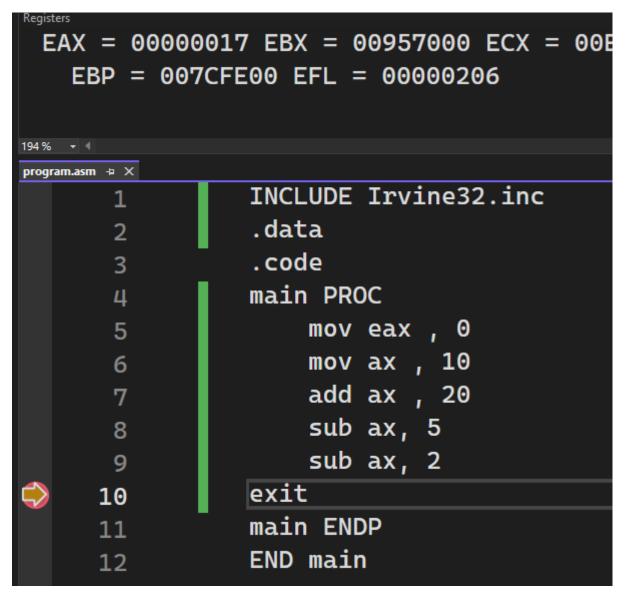
Q4

```
INCLUDE Irvine32.inc
.data
    zeros BYTE 10 DUP(0)
    words BYTE 5 DUP(?)
.code
main PROC
exit
main ENDP
END main
```

Q5

```
EAX = 012FFA30 EBX = 00000041 ECX = (
   EBP = 012FF9E8 EFL = 00000246
```

194 % ▼ ◀

program.asm ⊶ ✕

```
1          INCLUDE Irvine32.inc
2          .data
3          .code
4          main PROC
5              mov ebx , 0
6              mov bx , 65
7          exit
8          main ENDP
9          END main
10
```

```
EAX = 006AFB90 EBX = 00000041 ECX = 00
   EBP = 006AFB48 EFL = 00000246
```

194 % ▼ ◀

program.asm ⊶ ✕

```
1          INCLUDE Irvine32.inc
2          .data
3          .code
4          main PROC
5              mov ebx , 0
6              mov bx , 41h
7          exit
8          main ENDP
9          END main
10
```

EAX = 007BF9AC EBX = 00000041 ECX = 0(

EBP = 007BF964 EFL = 00000246

194 %

program.asm

```
1        INCLUDE Irvine32.inc
2        .data
3        .code
4        main PROC
5            mov ebx , 0
6            mov bx , 01000001b
7        exit
8        main ENDP
9        END main
10
```

EAX = 00CFFEC4 EBX = 00000041 ECX = (

EBP = 00CFFE7C EFL = 00000246

194 %

program.asm

```
1        INCLUDE Irvine32.inc
2        .data
3        .code
4        main PROC
5            mov ebx , 0
6            mov bx , 'A'
7        exit
8        main ENDP
9        END main
10
```

Q6

program.asm ⊣ X

```asm
1         INCLUDE Irvine32.inc
2         .data
3         .code
4         main PROC
5             mov eax , 0
6             mov ax , 10
7             add ax , 20
8             sub ax, 5
9             sub ax, 2
10        exit
11        main ENDP
12        END main
```

Q7

```
INCLUDE irvine32.inc
.data
.code
main PROC
        mov eax,10000h
        add eax,40000h
        sub eax,20000h
        call DumpRegs
exit
main ENDP
END main
```

Q8

```
.data
str1    BYTE "Computer",0
str2    BYTE "Science",0

msg1    BYTE "Before copy: ",0
msg2    BYTE "After copy : ",0
nl      BYTE 13,10,0

.code
main PROC
    mov edx, OFFSET msg1
    call WriteString
    mov edx, OFFSET str2
    call WriteString
    mov edx, OFFSET nl
    call WriteString

    mov esi, OFFSET str1
    mov edi, OFFSET str2
    mov ecx, LENGTHOF str1
    cld
    rep movsb

    mov edx, OFFSET msg2
    call WriteString
    mov edx, OFFSET str2
    call WriteString
    mov edx, OFFSET nl
    call WriteString
```

Microsoft Visual Studio Debug

```
Before copy: Science
After copy : Computer

E:\SetUp Project\Debug\SetUp Project.exe (process 126
To automatically close the console when debugging sto
le when debugging stops.
Press any key to close this window . . .
```