

LAB NO#9

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Section B

Task1.

```
.model small
.stack 100h
.data
    str1 db 'COAL LAB$'
    str2 db 'FALL 2021$'
    str3 db 'SECTION B$'
.code
    main proc
        mov ax, @data
        mov ds, ax

        ;call str1
        mov dx, offset str1
        call print
        call newline

        ;call str2
        mov dx, offset str2
        call print
        call newline

        ;call str3
        mov dx, offset str3
        call print
        call newline
        call exit

    main endp

;Print func
print proc
    mov ah,09
    int 21h
print endp

;Newline func
newline proc
    mov dl,10
    mov ah,02
    int 21h
    mov dl,13
    mov ah, 02
    int 21h
    ret
newline endp

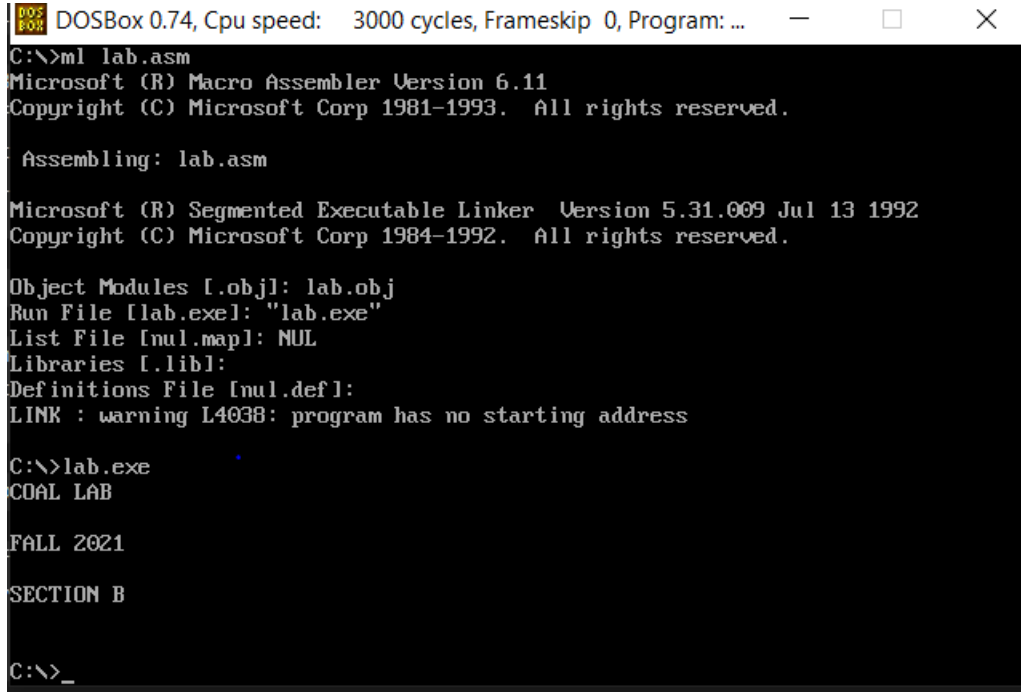
;exit func
exit proc
```

```

mov ah,4ch
int 21h
ret
exit endp

end

```



DOSBox 0.74, Cpu speed: 3000 cycles, Frameskip 0, Program: ...

```

C:\>ml lab.asm
Microsoft (R) Macro Assembler Version 6.11
Copyright (C) Microsoft Corp 1981-1993. All rights reserved.

Assembling: lab.asm

Microsoft (R) Segmented Executable Linker Version 5.31.009 Jul 13 1992
Copyright (C) Microsoft Corp 1984-1992. All rights reserved.

Object Modules [.obj]: lab.obj
Run File [lab.exe]: "lab.exe"
List File [nul.map]: NUL
Libraries [.lib]:
Definitions File [nul.def]:
LINK : warning L4038: program has no starting address

C:\>lab.exe
COAL LAB

FALL 2021

SECTION B

C:\>_

```

Task2.

```

.model small
.stack 100h
.data
    str1 db 'abcdefgh$'
    str2 db 'ABCDEFGH$'

.code
    main proc
        mov ax, @data
        mov ds, ax

        ;call str1
        mov si, offset str1
        call upper1
        call newline

        ;call str2
        mov si, offset str2
        call lower1
        call exit

    main endp

```

```
;Print func
print proc
mov ah,09
int 21h
print endp
```

```
;Newline func
newline proc
mov dl,10
mov ah,02
int 21h
mov dl,13
mov ah, 02
int 21h
ret
newline endp
```

```
;lower1 func
lower1 proc
mov cx,8
l1:
mov dl, [si]
add dl,32
mov ah,02
int 21h
inc si
loop l1
ret
lower1 endp
```

```
;upper1 func
upper1 proc
mov cx,8
l1:
mov dl, [si]
sub dl,32
mov ah,02
int 21h
inc si
loop l1
ret
upper1 endp
```

```
;exit func
exit proc
mov ah,4ch
int 21h
ret
exit endp
```

```
end
```

```
DOSBox 0.74, Cpu speed: 3000 cycles, Frameskip 0, Program: ...  
LINK : warning L4038: program has no starting address  
C:\>lab.exe  
  
C:\>ml lab.asm  
Microsoft (R) Macro Assembler Version 6.11  
Copyright (C) Microsoft Corp 1981-1993. All rights reserved.  
  
Assembling: lab.asm  
  
Microsoft (R) Segmented Executable Linker Version 5.31.009 Jul 13 1992  
Copyright (C) Microsoft Corp 1984-1992. All rights reserved.  
  
Object Modules [.obj]: lab.obj  
Run File [lab.exe]: "lab.exe"  
List File [nul.map]: NUL  
Libraries [.lib]:  
Definitions File [nul.def]:  
LINK : warning L4038: program has no starting address  
  
C:\>lab.exe  
ABCDEFGH  
abcdefgh  
C:\>
```