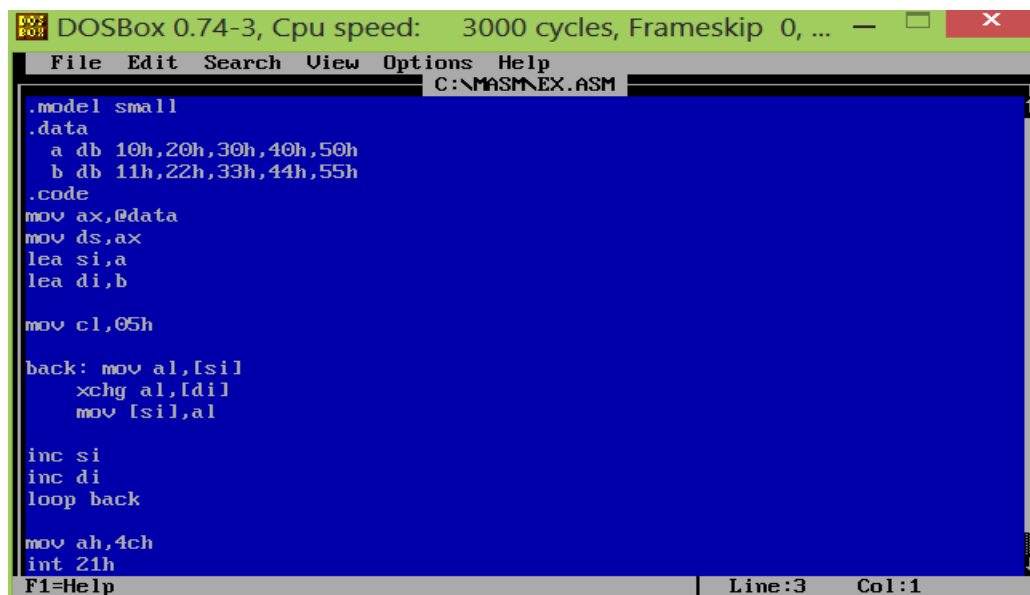


# PROGRAM 01:



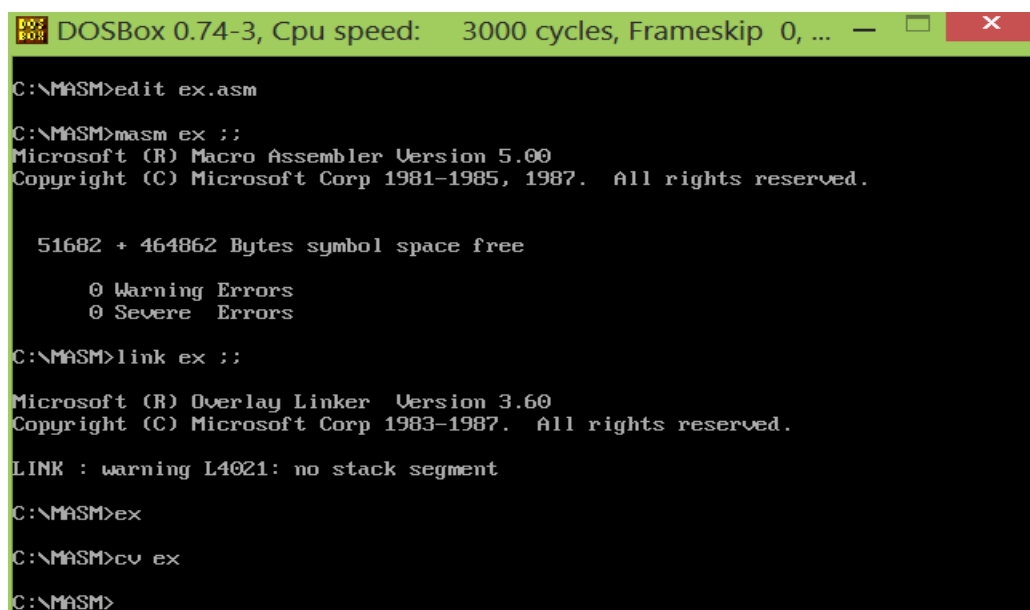
```
DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, ...
File Edit Search View Options Help
C:\MASM\EX.ASM
.model small
.data
    a db 10h,20h,30h,40h,50h
    b db 11h,22h,33h,44h,55h
.code
mov ax,@data
mov ds,ax
lea si,a
lea di,b

mov cl,05h

back: mov al,[si]
      xchg al,[di]
      mov [si],al

inc si
inc di
loop back

mov ah,4ch
int 21h
F1=Help | Line:3 Col:1
```



```
DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, ...
C:\MASM>edit ex.asm
C:\MASM>masm ex ;;
Microsoft (R) Macro Assembler Version 5.00
Copyright (C) Microsoft Corp 1981-1985, 1987. All rights reserved.

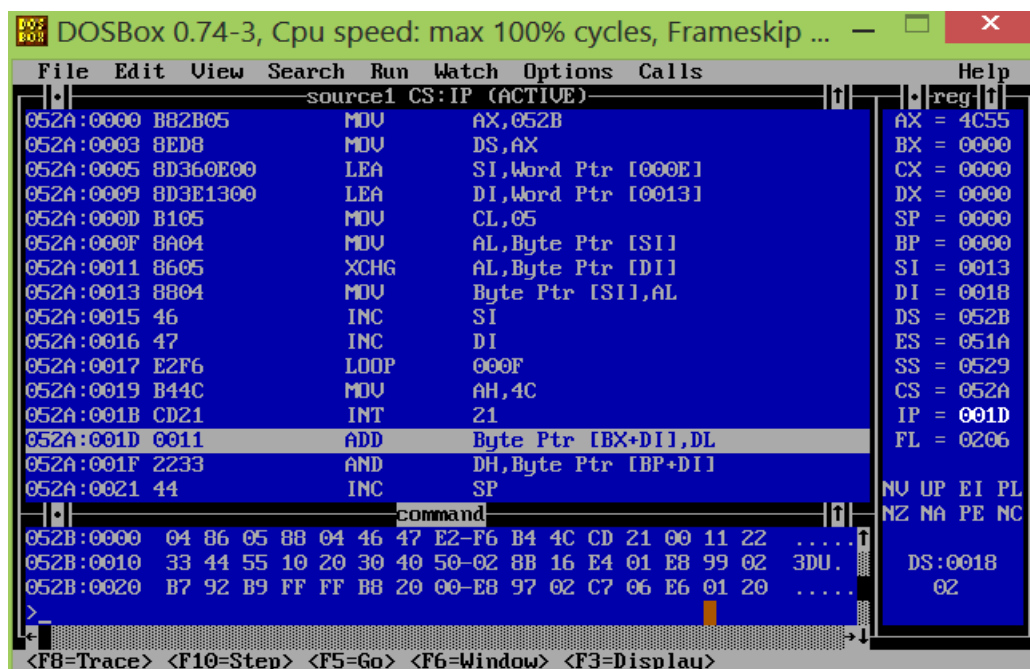
51682 + 464862 Bytes symbol space free

0 Warning Errors
0 Severe Errors

C:\MASM>link ex ;;
Microsoft (R) Overlay Linker Version 3.60
Copyright (C) Microsoft Corp 1983-1987. All rights reserved.

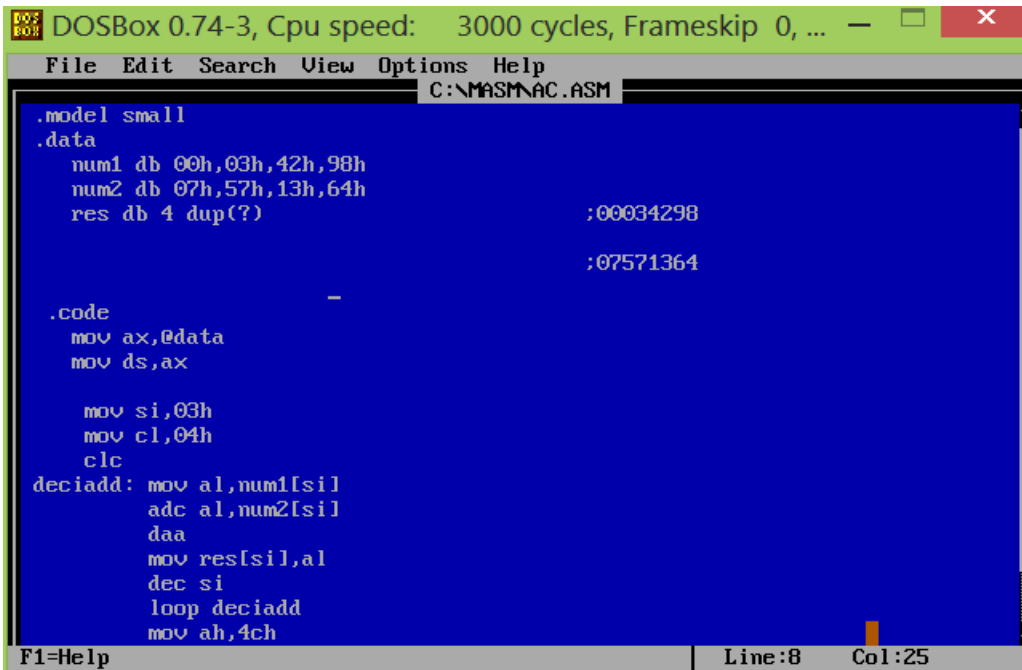
LINK : warning L4021: no stack segment

C:\MASM>ex
C:\MASM>cv ex
C:\MASM>
```



```
DOSBox 0.74-3, Cpu speed: max 100% cycles, Frameskip ...
File Edit View Search Run Watch Options Calls Help
source1 CS:IP (ACTIVE)
052A:0000 B82B05 MOV AX,052B AX = 4C55
052A:0003 8ED8 MOV DS,AX BX = 0000
052A:0005 8D360E00 LEA SI,Word Ptr [000E] CX = 0000
052A:0009 8D3E1300 LEA DI,Word Ptr [0013] DX = 0000
052A:000D B105 MOV CL,05 SP = 0000
052A:000F 8A04 MOV AL,Byte Ptr [SI] BP = 0000
052A:0011 8605 XCHG AL,Byte Ptr [DI] SI = 0013
052A:0013 8804 MOV Byte Ptr [SI],AL DI = 0018
052A:0015 46 INC SI DS = 052B
052A:0016 47 INC DI ES = 051A
052A:0017 E2F6 LOOP 000F SS = 0529
052A:0019 B44C MOV AH,4C CS = 052A
052A:001B CD21 INT 21 IP = 001D
052A:001D 0011 ADD Byte Ptr [BX+DI],DL FL = 0206
052A:001F 2233 AND DH,Byte Ptr [BP+DI]
052A:0021 44 INC SP
command
052B:0000 04 86 05 88 04 46 47 E2-F6 B4 4C CD 21 00 11 22 .....
052B:0010 33 44 55 10 20 30 40 50-02 8B 16 E4 01 E8 99 02 3DU.
052B:0020 B7 92 B9 FF FF B8 20 00-E8 97 02 C7 06 E6 01 20 .....
>
<F8=Trace> <F10=Step> <F5=Go> <F6=Window> <F3=Display>
```

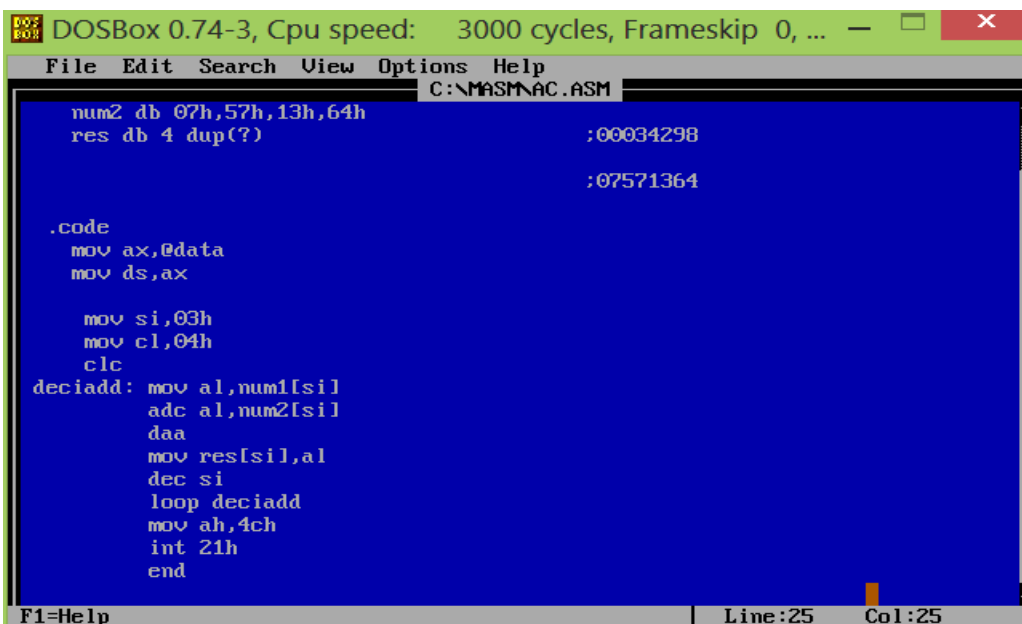
## PROGRAM 02:



```
.model small
.data
    num1 db 00h,03h,42h,98h
    num2 db 07h,57h,13h,64h
    res db 4 dup(?)                ;00034298
                                    ;07571364

.code
    mov ax,@data
    mov ds,ax

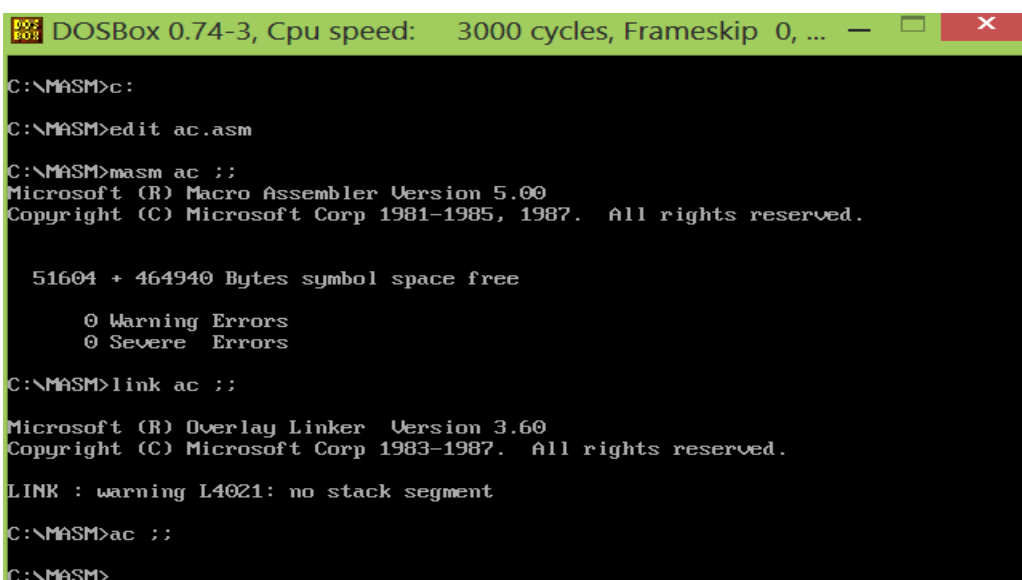
    mov si,03h
    mov cl,04h
    clc
deciadd: mov al,num1[si]
         adc al,num2[si]
         daa
         mov res[si],al
         dec si
         loop deciadd
         mov ah,4ch
```



```
    num2 db 07h,57h,13h,64h
    res db 4 dup(?)                ;00034298
                                    ;07571364

.code
    mov ax,@data
    mov ds,ax

    mov si,03h
    mov cl,04h
    clc
deciadd: mov al,num1[si]
         adc al,num2[si]
         daa
         mov res[si],al
         dec si
         loop deciadd
         mov ah,4ch
         int 21h
         end
```



```
C:\MASM>c:
C:\MASM>edit ac.asm
C:\MASM>masm ac ;;
Microsoft (R) Macro Assembler Version 5.00
Copyright (C) Microsoft Corp 1981-1985, 1987. All rights reserved.

51604 + 464940 Bytes symbol space free

    Warning Errors
    Severe Errors

C:\MASM>link ac ;;
Microsoft (R) Overlay Linker Version 3.60
Copyright (C) Microsoft Corp 1983-1987. All rights reserved.

LINK : warning L4021: no stack segment

C:\MASM>ac ;;
C:\MASM>_
```

DOSBox 0.74-3, Cpu speed: max 100% cycles, Frameskip ...

FileEditViewSearchRunWatchOptionsCallsHelp

source1 CS:IP (ACTIVE)

052A:0000 B82C05 MOV AX,052C

052A:0003 8ED8 MOV DS,AX

052A:0005 BE0300 MOV SI,0003

052A:0008 B104 MOV CL,04

052A:000A F8 CLC

052A:000B 8A840000 MOV AL,Byte Ptr [SI+0000]

052A:000F 12840400 ADC AL,Byte Ptr [SI+0004]

052A:0013 27 DAA

052A:0014 88840800 MOV Byte Ptr [SI+0008],AL

052A:0018 4E DEC SI

052A:0019 E2F0 LOOP 000B

052A:001B B44C MOV AH,4C

052A:001D CD21 INT 21

052A:001F 0000 ADD Byte Ptr [BX+SI],AL

052A:0021 034298 ADD AX,Word Ptr [BP+SI-68]

052A:0024 07 POP ES

AX = 4C07  
BX = 0000  
CX = 0000  
DX = 0000  
SP = 0000  
BP = 0000  
SI = FFFF  
DI = 0000  
DS = 052C  
ES = 051A  
SS = 0529  
CS = 052A  
IP = 001F  
FL = 0296

NU UP EI NG  
NZ AC PE NC

DS:FFFF  
00

command

052C:0000 00 03 42 98 07 57 13 64-07 60 56 62 01 E8 99 02 ..B..  
052C:0010 B7 92 B9 FF FF B8 20 00-E8 97 02 C7 06 E6 01 20 .....  
052C:0020 00 06 BE 06 E4 01 26 8B-16 2C 00 E8 7B 02 B7 92 .....  
>

<F8=Trace> <F10=Step> <F5=Go> <F6=Window> <F3=Display>