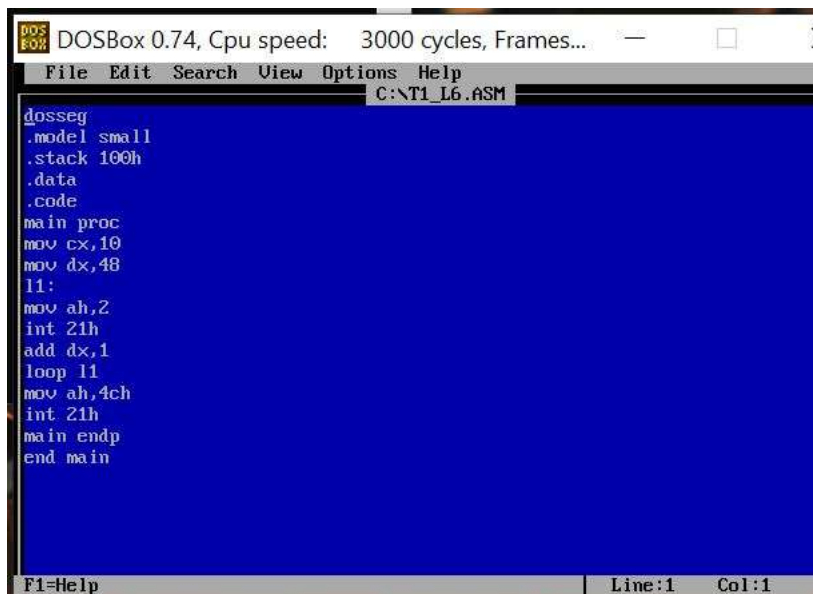
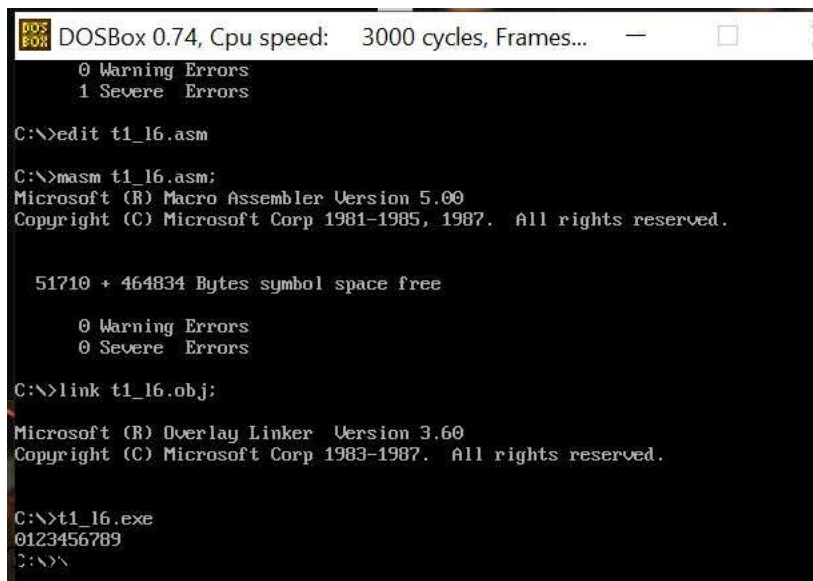


## Task 1:



```
DOSBox 0.74, Cpu speed: 3000 cycles, Frames...
File Edit Search View Options Help
C:\NT1_L6.ASM
dosseg
.model small
.stack 100h
.data
.code
main proc
mov cx,10
mov dx,48
l1:
mov ah,2
int 21h
add dx,1
loop l1
mov ah,4ch
int 21h
main endp
end main
F1=Help Line:1 Col:1
```



```
DOSBox 0.74, Cpu speed: 3000 cycles, Frames...
0 Warning Errors
1 Severe Errors

C:\>edit t1_l6.asm

C:\>masm t1_l6.asm:
Microsoft (R) Macro Assembler Version 5.00
Copyright (C) Microsoft Corp 1981-1985, 1987. All rights reserved.

51710 + 464834 Bytes symbol space free

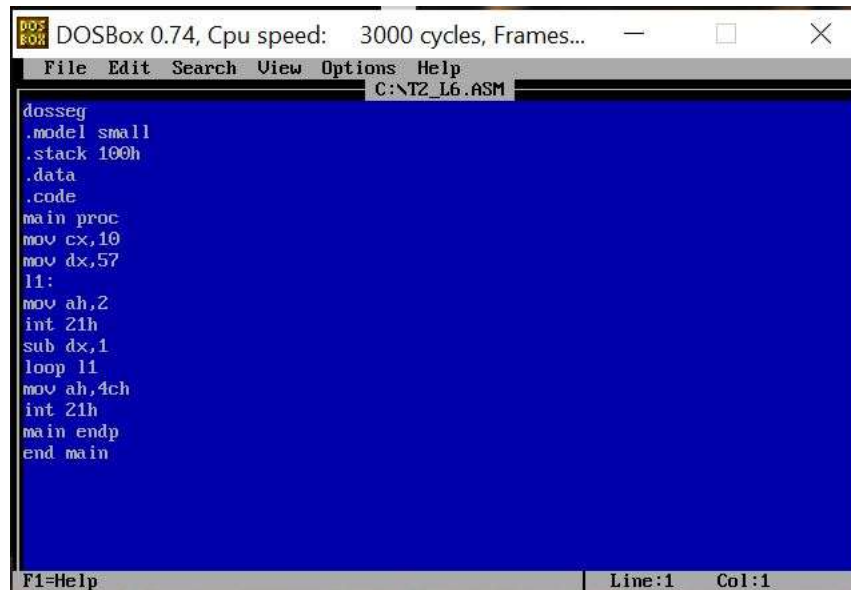
0 Warning Errors
0 Severe Errors

C:\>link t1_l6.obj:

Microsoft (R) Overlay Linker Version 3.60
Copyright (C) Microsoft Corp 1983-1987. All rights reserved.

C:\>t1_l6.exe
0123456789
C:\>
```

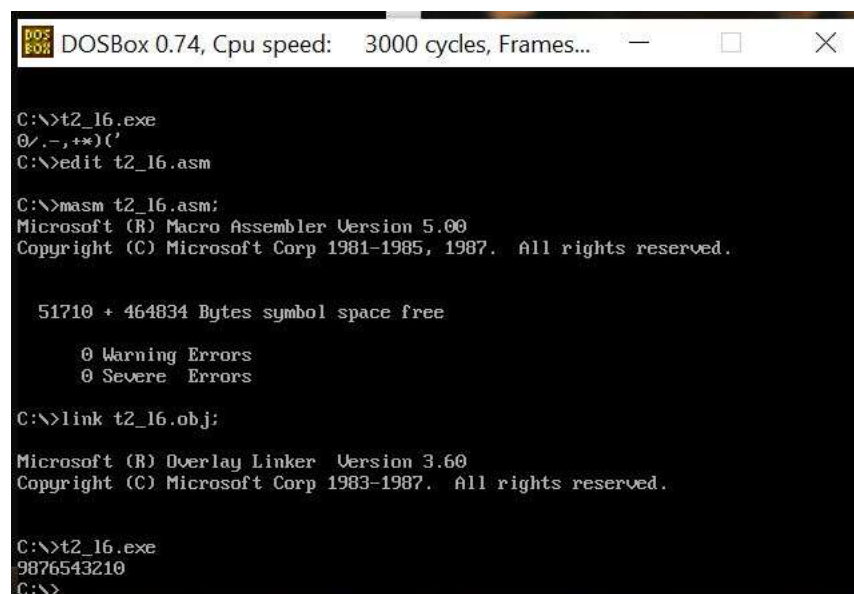
Task 2:



The screenshot shows a DOSBox 0.74 window with a blue background. The title bar reads "DOSBox 0.74, Cpu speed: 3000 cycles, Frames...". The menu bar includes "File", "Edit", "Search", "View", "Options", and "Help". The active window is titled "C:\T2\_L6.ASM" and contains the following assembly code:

```
dosseg
.model small
.stack 100h
.data
.code
main proc
mov cx,10
mov dx,57
l1:
mov ah,2
int 21h
sub dx,1
loop l1
mov ah,4ch
int 21h
main endp
end main
```

The status bar at the bottom shows "F1=Help" on the left and "Line:1 Col:1" on the right.



The screenshot shows a DOSBox 0.74 window with a black background. The title bar reads "DOSBox 0.74, Cpu speed: 3000 cycles, Frames...". The command prompt shows the following commands and output:

```
C:\>t2_l6.exe
0/.-,**)('
C:\>edit t2_l6.asm

C:\>masm t2_l6.asm:
Microsoft (R) Macro Assembler Version 5.00
Copyright (C) Microsoft Corp 1981-1985, 1987. All rights reserved.

51710 + 464834 Bytes symbol space free

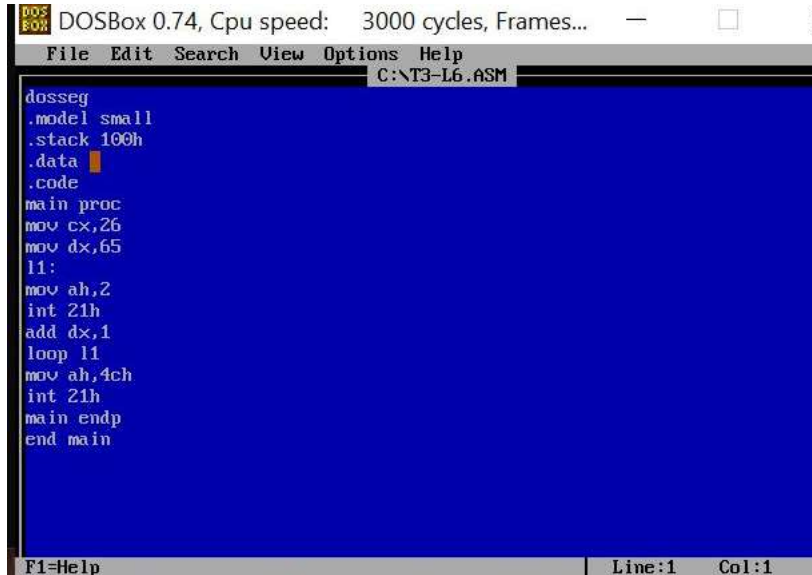
0 Warning Errors
0 Severe Errors

C:\>link t2_l6.obj:

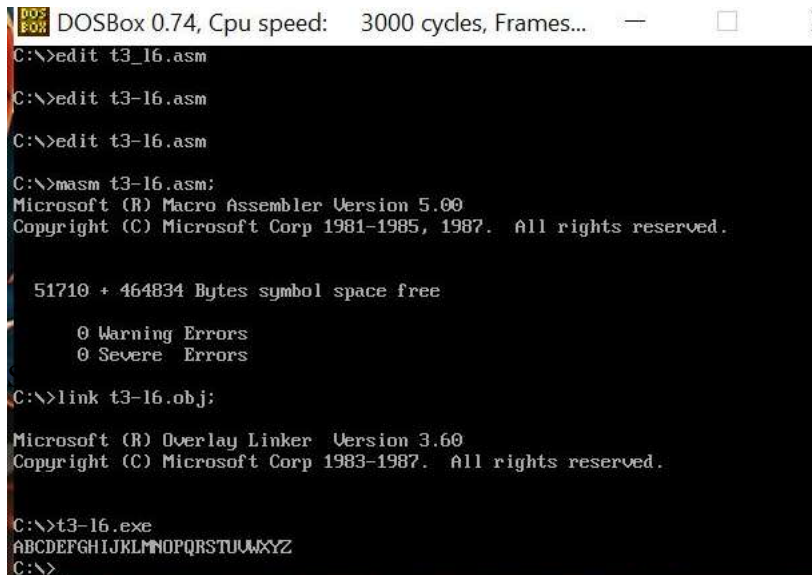
Microsoft (R) Overlay Linker Version 3.60
Copyright (C) Microsoft Corp 1983-1987. All rights reserved.

C:\>t2_l6.exe
9876543210
C:\>
```

### Task 3:



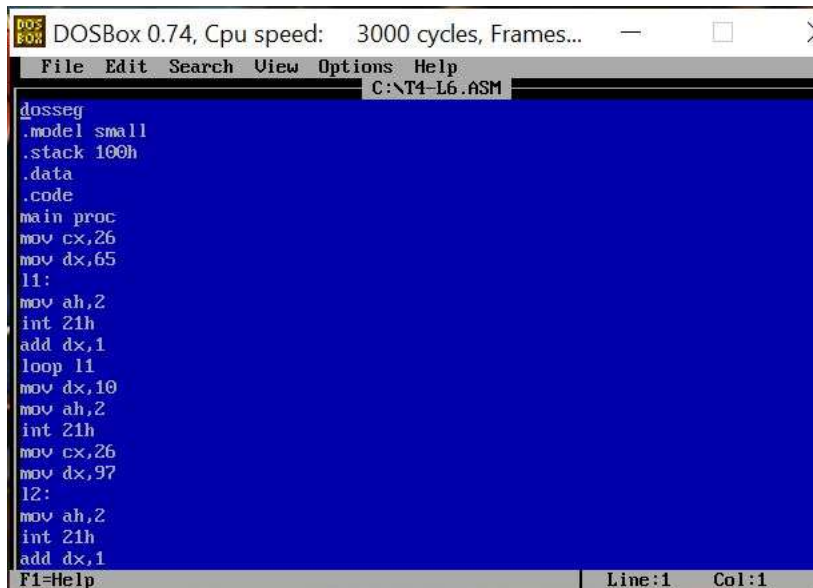
```
DOSBox 0.74, Cpu speed: 3000 cycles, Frames...
File Edit Search View Options Help
C:\T3-L6.ASM
dosseg
.model small
.stack 100h
.data
.code
main proc
mov cx,26
mov dx,65
l1:
mov ah,2
int 21h
add dx,1
loop l1
mov ah,4ch
int 21h
main endp
end main
F1=Help Line:1 Col:1
```



```
DOSBox 0.74, Cpu speed: 3000 cycles, Frames...
C:\>edit t3_l6.asm
C:\>edit t3-l6.asm
C:\>edit t3-l6.asm
C:\>masm t3-l6.asm:
Microsoft (R) Macro Assembler Version 5.00
Copyright (C) Microsoft Corp 1981-1985, 1987. All rights reserved.

51710 + 464834 Bytes symbol space free
0 Warning Errors
0 Severe Errors
C:\>link t3-l6.obj:
Microsoft (R) Overlay Linker Version 3.60
Copyright (C) Microsoft Corp 1983-1987. All rights reserved.
C:\>t3-l6.exe
ABCDEFGHIJKLMNOPQRSTUVWXYZ
C:\>_
```

#### Task 4:



DOSBox 0.74, Cpu speed: 3000 cycles, Frames...

File Edit Search View Options Help

C:\T4-L6.ASM

```
dosseg
.model small
.stack 100h
.data
.code
main proc
mov cx,26
mov dx,65
l1:
mov ah,2
int 21h
add dx,1
loop l1
mov dx,10
mov ah,2
int 21h
mov cx,26
mov dx,97
l2:
mov ah,2
int 21h
add dx,1
```

F1=Help Line:1 Col:1



DOSBox 0.74, Cpu speed: 3000 cycles, Frames...

C:\>t3-l6.exe  
ABCDEFGHIJKLMNOPQRSTUVWXYZ  
C:\>edit t4-l6.asm

C:\>masm t4-l6.asm  
Microsoft (R) Macro Assembler Version 5.00  
Copyright (C) Microsoft Corp 1981-1985, 1987. All rights reserved.

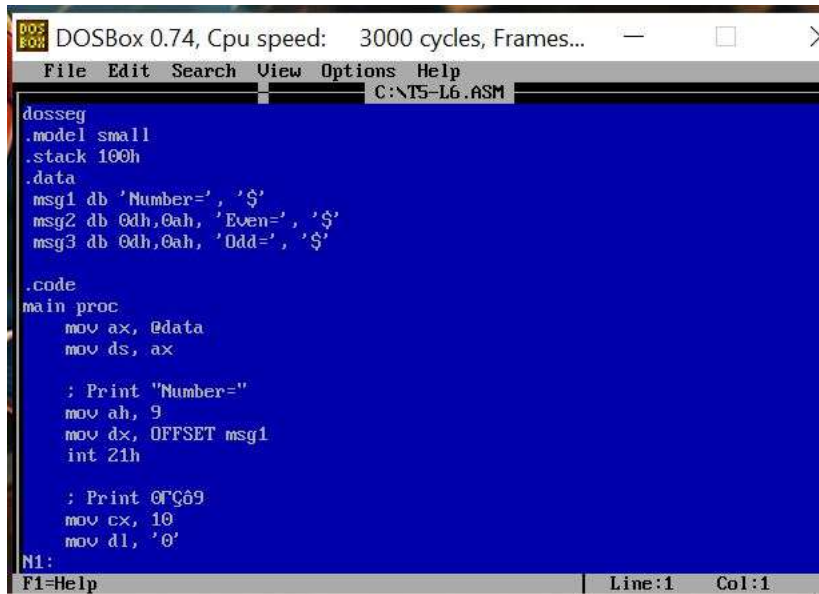
51710 + 464834 Bytes symbol space free

0 Warning Errors  
0 Severe Errors

C:\>link t4-l6.obj  
Microsoft (R) Overlay Linker Version 3.60  
Copyright (C) Microsoft Corp 1983-1987. All rights reserved.

C:\>t4-l6.exe  
ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
0123456789

Task 5:



```
DOSBox 0.74, Cpu speed: 3000 cycles, Frames...
File Edit Search View Options Help
C:\T5-16.ASM

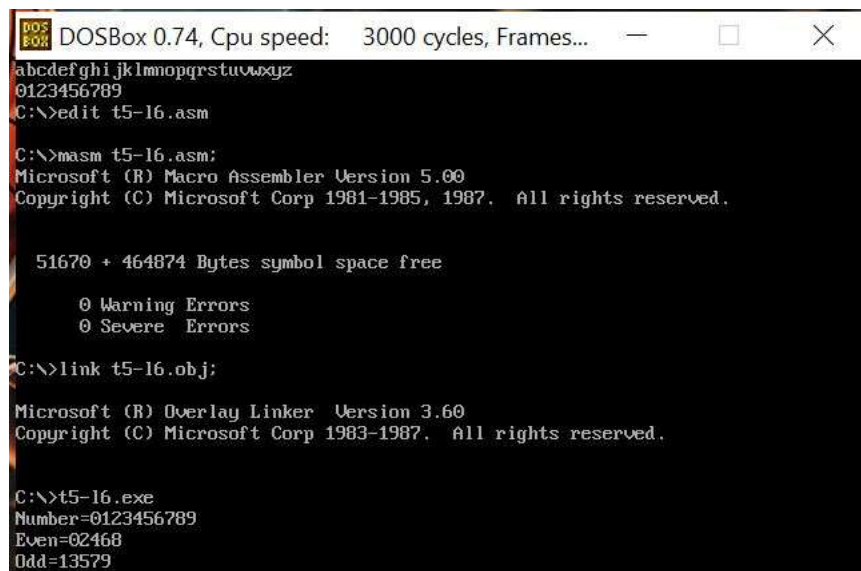
dosseg
.model small
.stack 100h
.data
msg1 db 'Number=', '$'
msg2 db 0dh,0ah, 'Even=', '$'
msg3 db 0dh,0ah, 'Odd=', '$'

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

    ; Print "Number="
    mov ah, 9
    mov dx, OFFSET msg1
    int 21h

    ; Print 0F069
    mov cx, 10
    mov dl, '0'

N1:
F1=Help | Line:1 Col:1
```



```
DOSBox 0.74, Cpu speed: 3000 cycles, Frames...
abcdefghijklmnopqrstuvwxyz
0123456789
C:\>edit t5-16.asm

C:\>masm t5-16.asm;
Microsoft (R) Macro Assembler Version 5.00
Copyright (C) Microsoft Corp 1981-1985, 1987. All rights reserved.

51670 + 464874 Bytes symbol space free

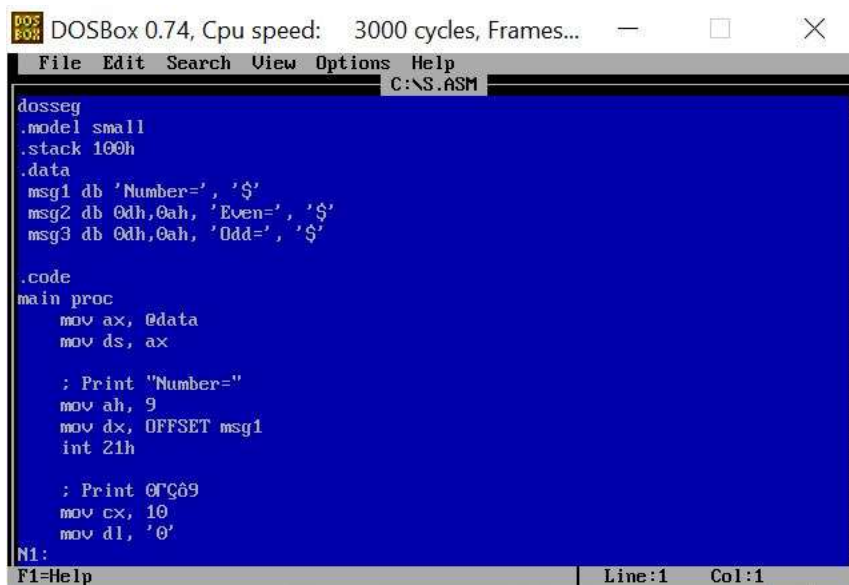
0 Warning Errors
0 Severe Errors

C:\>link t5-16.obj;

Microsoft (R) Overlay Linker Version 3.60
Copyright (C) Microsoft Corp 1983-1987. All rights reserved.

C:\>t5-16.exe
Number=0123456789
Even=02468
Odd=13579
```

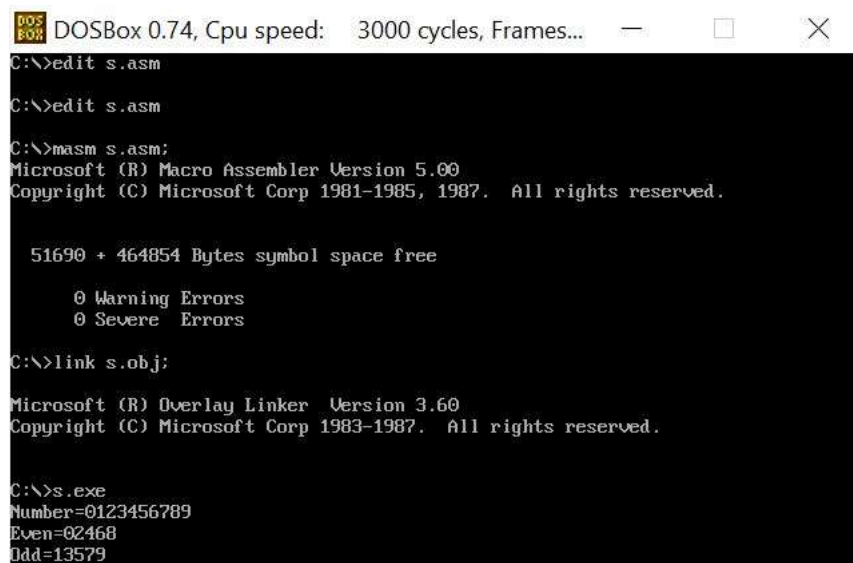
## Task 6:



```
DOSBox 0.74, Cpu speed: 3000 cycles, Frames...
File Edit Search View Options Help
C:\S.ASM
dosseg
.model small
.stack 100h
.data
msg1 db 'Number=', '$'
msg2 db 0dh,0ah, 'Even=', '$'
msg3 db 0dh,0ah, 'Odd=', '$'
.code
main proc
    mov ax, @data
    mov ds, ax

    ; Print "Number="
    mov ah, 9
    mov dx, OFFSET msg1
    int 21h

    ; Print 0123456789
    mov cx, 10
    mov dl, '0'
NI:
F1=Help | Line:1 Col:1
```



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

51690 + 464854 Bytes symbol space free

0 Warning Errors
0 Severe Errors
C:\>link s.obj:
Microsoft (R) Overlay Linker Version 3.60
Copyright (C) Microsoft Corp 1983-1987. All rights reserved.

C:\>s.exe
Number=0123456789
Even=02468
Odd=13579
```