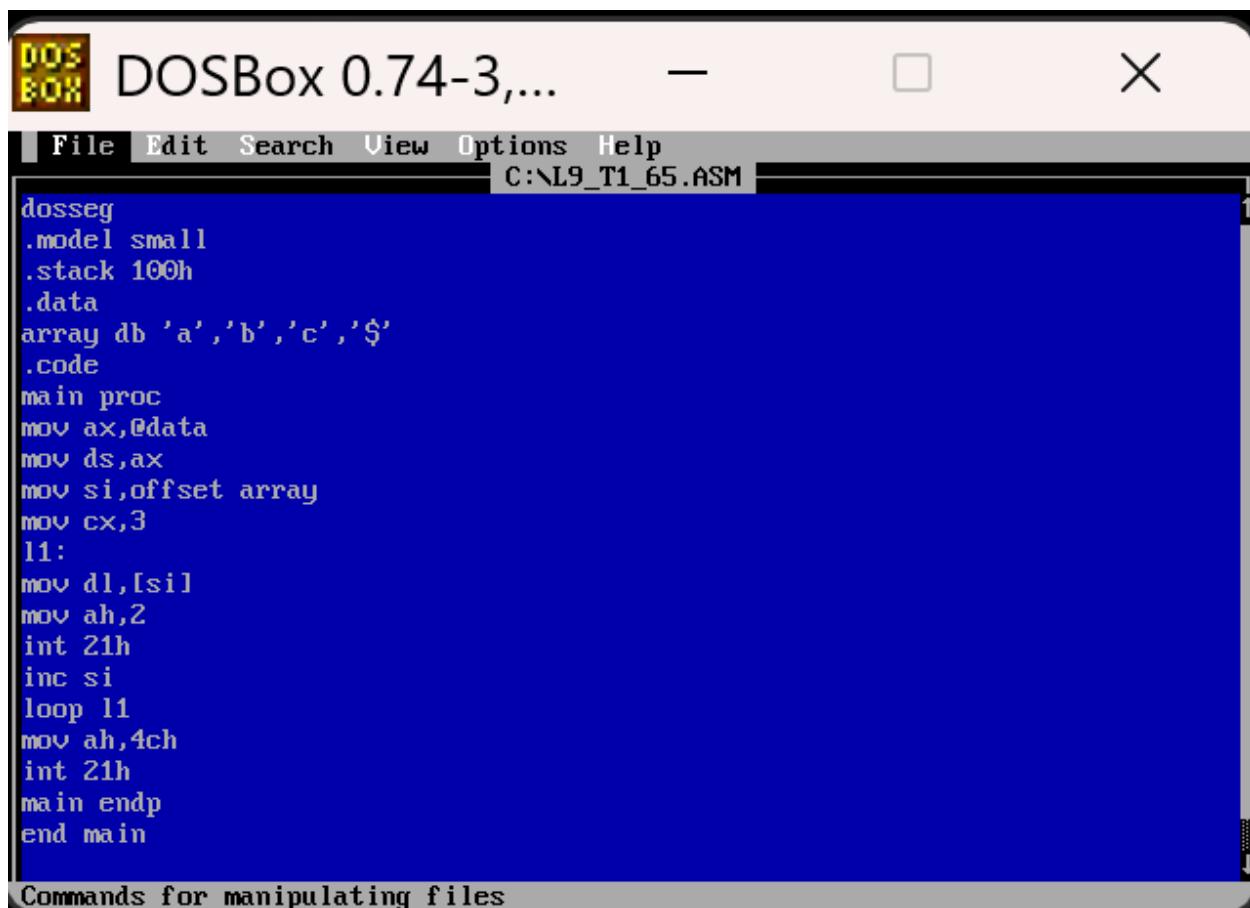


NAME: Babar Ali

SAP ID: 65731

SUBJECT: COAL

LAB9-TASK1



DOSBox 0.74-3,...

C:\NL9\_T1\_65.ASM

```
dosseg
.model small
.stack 100h
.data
array db 'a','b','c','$'
.code
main proc
mov ax,@data
mov ds,ax
mov si,offset array
mov cx,3
l1:
mov dl,[si]
mov ah,2
int 21h
inc si
loop l1
mov ah,4ch
int 21h
main endp
end main
```

Commands for manipulating files

:

**DOS Box** DOSBox 0.74-3,... — ☐ ×

```
Copyright (C) Microsoft Corp 1981-1985, 1987. All rights reserved.

Object filename [L9_T1_65731.OBJ]:
Source listing [NUL.LST]:
Cross-reference [NUL.CRF]:

51602 + 464942 Bytes symbol space free

0 Warning Errors
0 Severe Errors

C:\>link L9_T1_65731.obj

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

Run File [L9_T1_65731.EXE]:
List File [NUL.MAP]:
Libraries [.LIB]:

C:\>L9_T1_65731.exe
abc
C:\>edit L9_T1_65731.asm

C:\>
```

## LAB9-TASK2

DOSBox 0.74-3,...

```
dosseg
.model small
.stack 100h
.data
    array db 100 dup('$')
.code
main proc
    mov ax,@data
    mov ds,ax
    mov si,offset array
l1:
    mov ah,1
    int 21h
    cmp al,13
    je program
    mov [si],al
    inc si
    jmp l1
program:
    mov dx,offset array
    mov ah,9
    int 21h
```

Commands for manipulating files

int 21h
mov ah,4ch
int 21h
main endp
end main

Commands for manipulating files

DOSBox 0.74-3,...

```
Object filename [L9_T2_65731.OBJ]:
Source listing [NUL.LST]:
Cross-reference [NUL.CRF]:

51638 + 464906 Bytes symbol space free

0 Warning Errors
0 Severe Errors

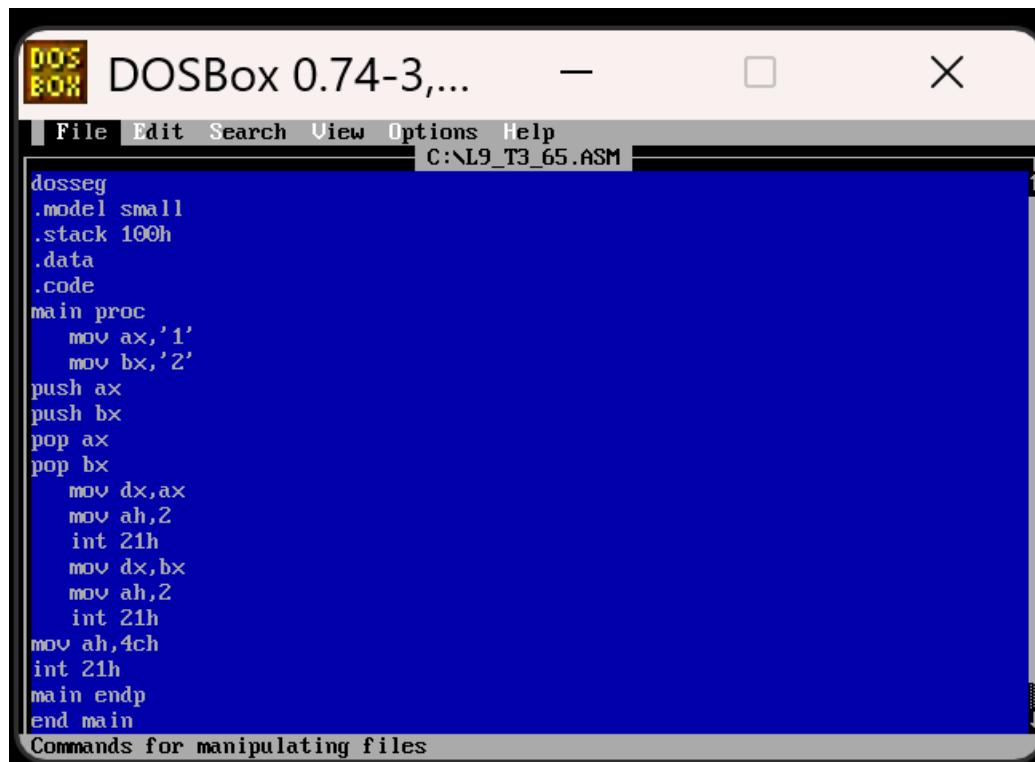
C:>edit L9_T2_65731.asm
C:>link L9_T2_65731.obj

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Run File [L9_T2_65731.EXE]:
List File [NUL.MAP]:
Libraries [.LIB]:

C:>L9_T2_65731.exe
My name is Babar.
My name is Babar.
C:>_
```

### LAB9-TASK3



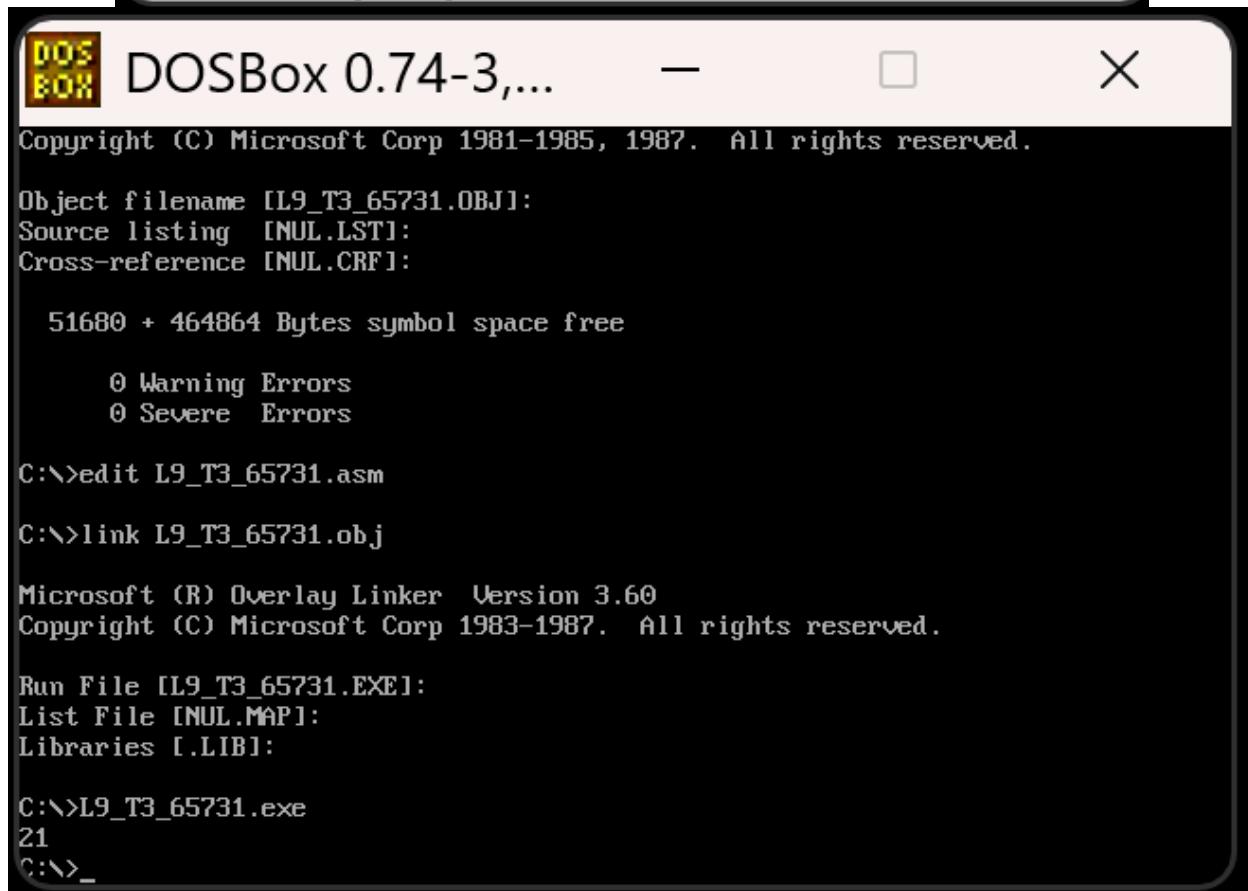
DOSBox 0.74-3,...

File Edit Search View Options Help

C:\L9\_T3\_65.ASM

```
dosseg
.model small
.stack 100h
.data
.code
main proc
    mov ax,'1'
    mov bx,'2'
push ax
push bx
pop ax
pop bx
    mov dx,ax
    mov ah,2
    int 21h
    mov dx,bx
    mov ah,2
    int 21h
    mov ah,4ch
    int 21h
main endp
end main
```

Commands for manipulating files



DOSBox 0.74-3,...

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Object filename [L9\_T3\_65731.OBJ]:

Source listing [NUL.LST]:

Cross-reference [NUL.CRF]:

51680 + 464864 Bytes symbol space free

0 Warning Errors

0 Severe Errors

C:\>edit L9\_T3\_65731.asm

C:\>link L9\_T3\_65731.obj

Microsoft (R) Overlay Linker Version 3.60

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Run File [L9\_T3\_65731.EXE]:

List File [NUL.MAP]:

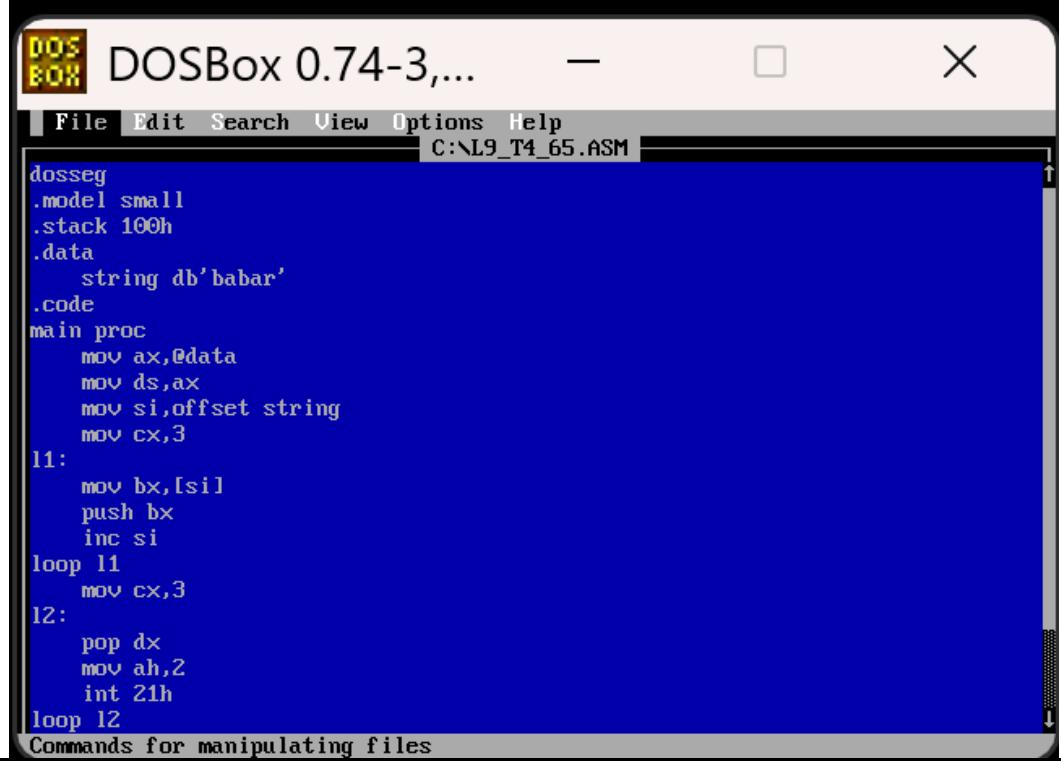
Libraries [.LIB]:

C:\>L9\_T3\_65731.exe

21

C:\>

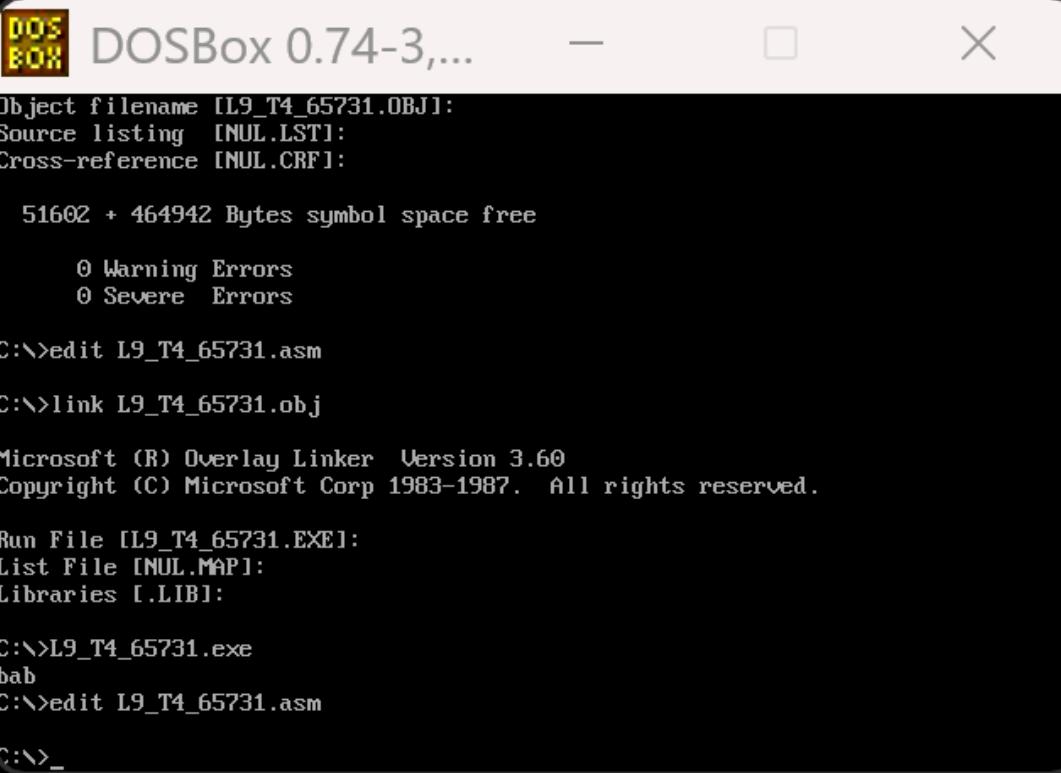
#### LAB9-TASK4



DOSBox 0.74-3,...

File Edit Search View Options Help C:\L9\_T4\_65.ASM

```
dosseg
.model small
.stack 100h
.data
    string db 'babar'
.code
main proc
    mov ax,@data
    mov ds,ax
    mov si,offset string
    mov cx,3
11:
    mov bx,[si]
    push bx
    inc si
loop 11
    mov cx,3
12:
    pop dx
    mov ah,2
    int 21h
loop 12
Commands for manipulating files
```



DOSBox 0.74-3,...

Object filename [L9\_T4\_65731.OBJ]:  
Source listing [NUL.LST]:  
Cross-reference [NUL.CRF]:

51602 + 464942 Bytes symbol space free

0 Warning Errors  
0 Severe Errors

C:\>edit L9\_T4\_65731.asm

C:\>link L9\_T4\_65731.obj

Microsoft (R) Overlay Linker Version 3.60  
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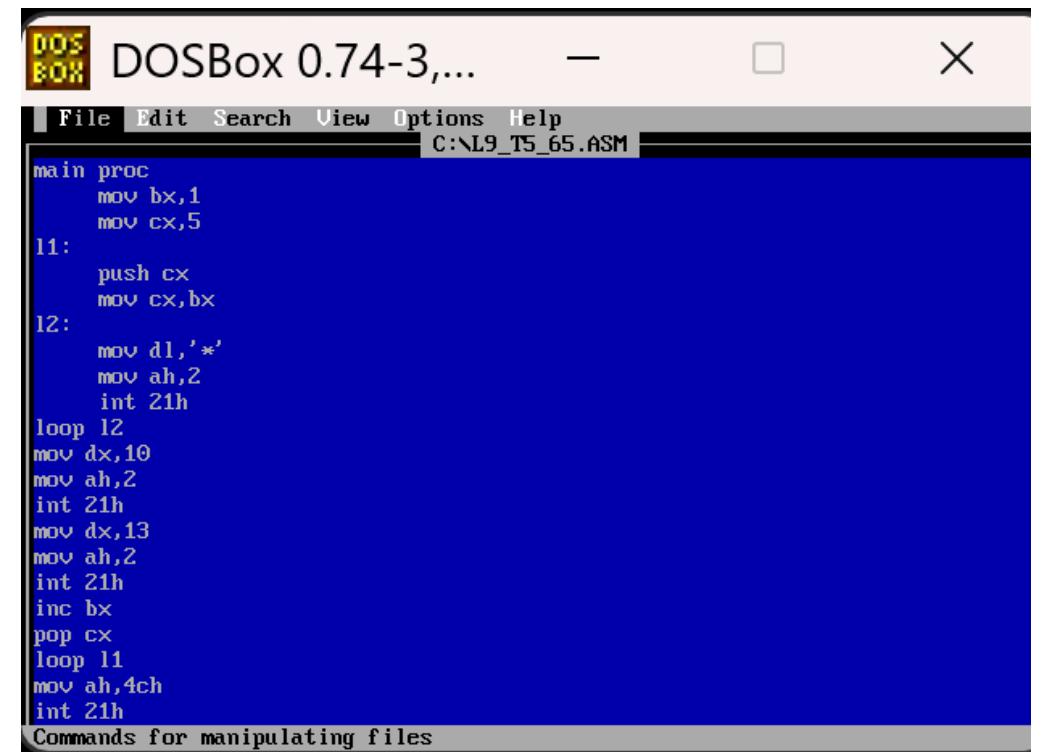
Run File [L9\_T4\_65731.EXE]:  
List File [NUL.MAP]:  
Libraries [.LIB]:

C:\>L9\_T4\_65731.exe  
bab

C:\>edit L9\_T4\_65731.asm

C:\>\_

## LAB9-TASK5

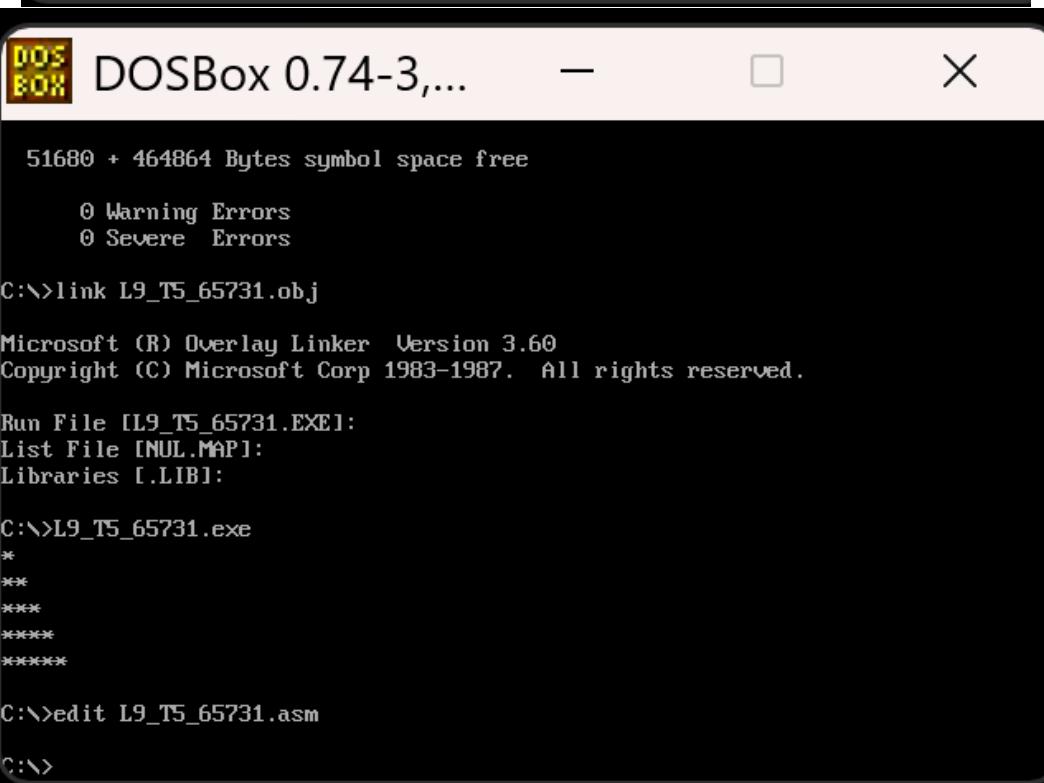


DOSBox 0.74-3,...

File Edit Search View Options Help C:\L9\_T5\_65.ASM

```
main proc
    mov bx,1
    mov cx,5
11:
    push cx
    mov cx,bx
12:
    mov dl,'*'
    mov ah,2
    int 21h
loop 12
mov dx,10
mov ah,2
int 21h
mov dx,13
mov ah,2
int 21h
inc bx
pop cx
loop 11
mov ah,4ch
int 21h
```

Commands for manipulating files



DOSBox 0.74-3,...

```
51680 + 464864 Bytes symbol space free
0 Warning Errors
0 Severe Errors

C:>link L9_T5_65731.obj

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Run File [L9_T5_65731.EXE]:
List File [NUL.MAP]:
Libraries [.LIB]:

C:>L9_T5_65731.exe
*
**
***
****
*****
```

```
C:>edit L9_T5_65731.asm
C:>
```

## LAB9-TASK6

The image shows two windows from a DOSBox environment. The top window displays assembly code in a text editor, and the bottom window shows the output of a Microsoft Overlay Linker.

**Editor Window (C:\L9\_T6\_65.ASM):**

```
main proc
    mov bx,5
    mov cx,5
l1:
    push cx
    mov cx,bx
l2:
    mov dl,'*'
    mov ah,2
    int 21h
loop l2
mov dx,10
mov ah,2
int 21h
mov dx,13
mov ah,2
int 21h
dec bl
pop cx
loop l1
mov ah,4ch
int 21h
```

**Linker Window (Output):**

```
51680 + 464864 Bytes symbol space free
0 Warning Errors
0 Severe Errors
C:\>link L9_T6_65731.obj

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Run File [L9_T6_65731.EXE]:
List File [NUL.MAP]:
Libraries [.LIB]:
C:\>L9_T6_65731.exe
*****
****
***
**
*
C:\>edit L9_T6_65731.asm
C:\>
```

## LAB9-TASK7

DOSBox 0.74-3,...

File Edit Search View Options Help C:\L9\_T7\_65.ASM

```
main proc
    mov bx,1
    mov cx,5
11:
    push cx
    mov cx,bx
    mov dl,65
12:
    mov ah,2
    int 21h
    inc dl
loop 12
mov dx,10
mov ah,2
int 21h
mov dx,13
mov ah,2
int 21h
inc bl
pop cx
loop 11
mov ah,4ch
```

Commands for manipulating files

DOSBox 0.74-3,...

```
51680 + 464864 Bytes symbol space free
0 Warning Errors
0 Severe Errors

C:\>link L9_T7_65731.obj

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Run File [L9_T7_65731.EXE]:
List File [NUL.MAP]:
Libraries [.LIB]:

C:\>L9_T7_65731.exe
A
AB
ABC
ABCD
ABCDE

C:\>edit L9_T7_65731.asm

C:\>
```

LAB9-TASK8

