

LAB3:DISPLAY EQUIVALENT ASCII CODE

; PROGRAM :: PROGRAM TO READ AN ALPHANUMERIC CHARACTER AND DISPLAY ITS

; EQUIVALENT ASCII CODE

.model small

.data

msg1 db 0dh,0ah," enter alpha numeric character \$"

res db 02 dup(0)

.code

mov ax,@data

mov ds,ax

lea dx,msg1

call disp

mov ah,01h

int 21h

mov bl,al

mov cl,4

shr al,cl

cmp al,0ah

jc digit

ADD AL, 07H

digit : add al,30h

mov res,al

add bl,0fh

cmp bl,0ah

jc digit1

```
        add bl,07h
digit1: add bl,30h
        mov res+1,bl

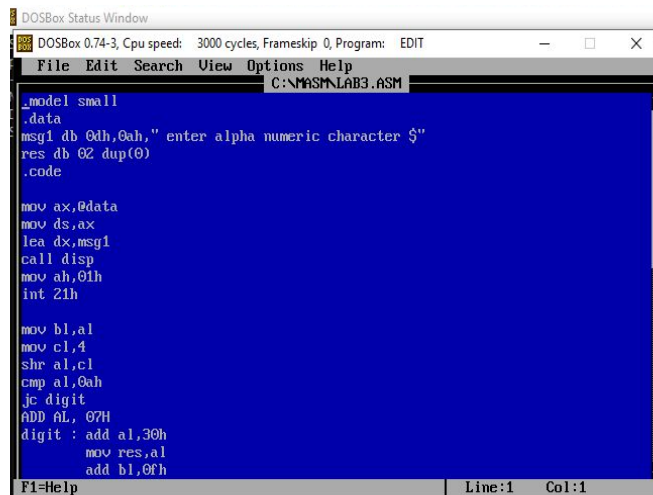
        mov ah,00h
        mov al,03h
        int 10h

        mov ah,02h
        mov bh,00h
        mov dh,0ch
        mov dl,28h
        int 10h

        mov res+2,'$'
        lea dx,res
        call disp
        mov ah,4ch
        int 21h

        disp proc near
        mov ah,09h
        int 21h
        ret
        disp endp
end
```

PROGRAM:



DOSBox Status Window

DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Program: EDIT

File Edit Search View Options Help

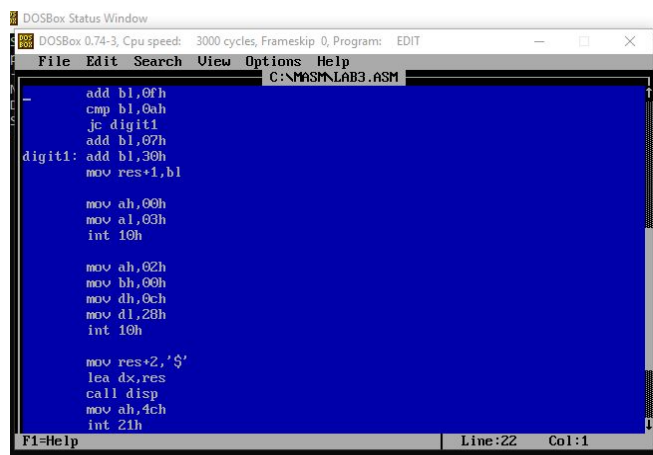
C:\MASM\LAB3.ASM

```
.model small
.data
msg1 db 0dh,0ah," enter alpha numeric character $"
res db 02 dup(0)
.code

mov ax,@data
mov ds,ax
lea dx,msg1
call disp
mov ah,01h
int 21h

mov bl,al
mov cl,4
shr al,cl
cmp al,0ah
jc digit
add AL, 07H
digit: add al,30h
mov res,al
add bl,0fh
```

F1=Help Line:1 Col:1



DOSBox Status Window

DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Program: EDIT

File Edit Search View Options Help

C:\MASM\LAB3.ASM

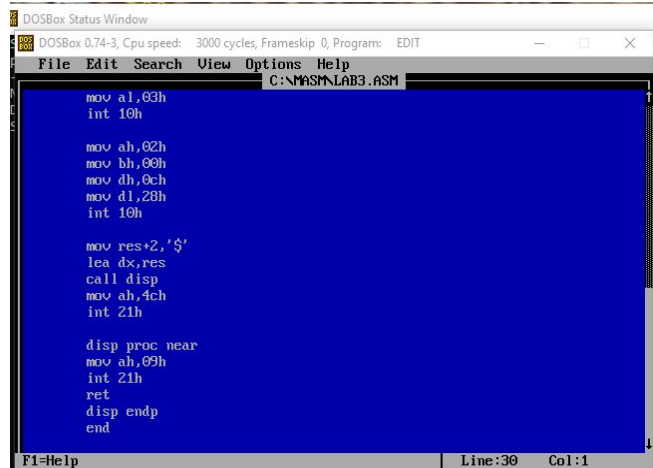
```
add bl,0fh
cmp bl,0ah
jc digit1
add bl,07h
digit1: add bl,30h
mov res+1,bl

mov ah,09h
mov al,09h
int 10h

mov ah,02h
mov bh,00h
mov dh,0ch
mov dl,28h
int 10h

mov res+2,'$'
lea dx,res
call disp
mov ah,4ch
int 21h
```

F1=Help Line:22 Col:1



DOSBox Status Window

DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Program: EDIT

File Edit Search View Options Help

C:\MASM\LAB3.ASM

```
mov al,09h
int 10h

mov ah,02h
mov bh,00h
mov dh,0ch
mov dl,28h
int 10h

mov res+2,'$'
lea dx,res
call disp
mov ah,4ch
int 21h

disp proc near
mov ah,09h
int 21h
ret
disp endp
end
```

F1=Help Line:30 Col:1

output:

The screenshot shows the DOSBox Status Window with the following content:

DOSBox 0.74-3, Cpu speed: max 100% cycles, Frameskip 0, Program: CV

File Edit View Search Run Watch Options Calls Help

local

source1 CS:IP (ACTIVE)

Address	Hex	Instruction	Comment
052A:0043	C6062C0024	MOV	Byte Ptr [002C],24
052A:0048	8D162A00	LEA	DX,Word Ptr [002A]
052A:004C	E80400	CALL	0053
052A:004F	B44C	MOV	AH,4C
052A:0051	CD21	INT	21
052A:0053	B409	MOV	AH,09
052A:0055	CD21	INT	21
052A:0057	C3	RET	
052A:0058	0D0A20	OR	AX,200A
052A:005B	656E	OUTSB	GS:
052A:005D	7465	JZ	00C4
052A:005F	7220	JB	0081
052A:0061	61	POPA	
052A:0062	6C	INSB	
052A:0063	7068	JO	00CD
052A:0065	61	POPA	

reg

Register	Value
AX	4C03
BX	0046
CX	0004
DX	002A
SP	0000
BP	0000
SI	0000
DI	0000
DS	052F
ES	051A
SS	0529
CS	052A
IP	0053
FL	0202

command

Address	Hex	Instruction	Comment
052F:0000	4C CD 21 B4 09 CD 21 C3-0D 0A 20 65 6E 74 65 72	L...	
052F:0010	20 61 6C 70 68 61 20 6E-75 6D 65 72 69 63 20 63	alph	

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

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