

LAB 3 (Task 1,2)

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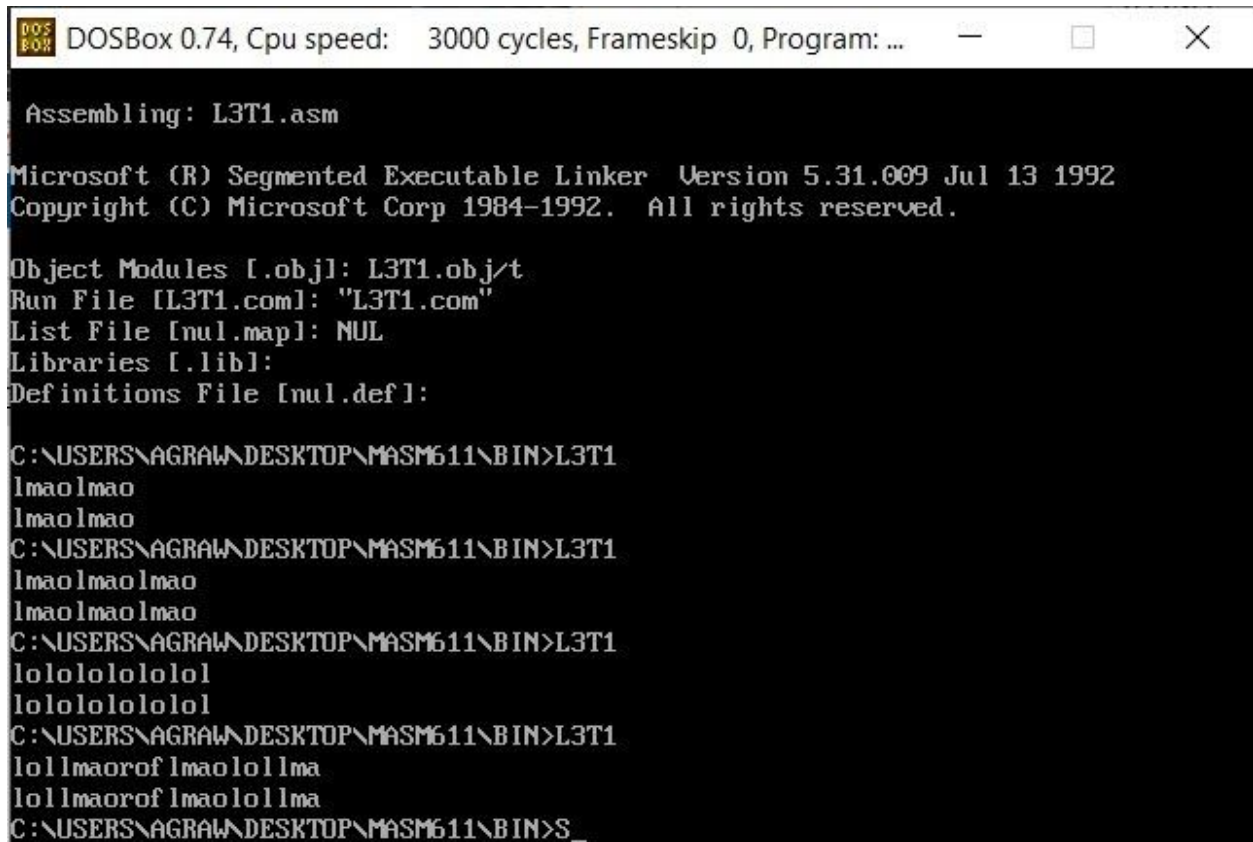
TASK 3

- **Task1:** *Write an ALP that will take in a string of maximum 20 characters from user and display it on the next line on the screen.*

Code:

```
.model tiny
.486
.data
maxl db 15h
actl db ?
inpl db 16h dup('$')
disl db 0dh,0ah,'$'
.code
.startup
    lea dx,maxl
    mov ah,0ah
    int 21h
    lea dx,disl
    mov ah,09h
    int 21h
    lea dx,inpl
    mov ah,09h
    int 21h
.exit
end
```

Screen Shot-



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

Assembling: L3T1.asm

Microsoft (R) Segmented Executable Linker Version 5.31.009 Jul 13 1992
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Object Modules [.obj]: L3T1.obj/t
Run File [L3T1.com]: "L3T1.com"
List File [nul.map]: NUL
Libraries [.lib]:
Definitions File [nul.def]:

C:\USERS\AGRAW\DESKTOP\MASM611\BIN>L3T1
lmaolmao
lmaolmao
C:\USERS\AGRAW\DESKTOP\MASM611\BIN>L3T1
lmaolmaolmao
lmaolmaolmao
C:\USERS\AGRAW\DESKTOP\MASM611\BIN>L3T1
lolololololol
lolololololol
C:\USERS\AGRAW\DESKTOP\MASM611\BIN>L3T1
lolлмаorof lmaolollma
lolлмаorof lmaolollma
C:\USERS\AGRAW\DESKTOP\MASM611\BIN>S_
```

Explanation :-

The Screenshot attached shows 4 sets of inputs with the last one having maximum number of characters allowed

Task 4

-Write an ALP that does the following

- 1. Display the string "Enter User Name" and goes to the next line*
- 2. Takes in the user entered string compares with user name value already stored in memory*
- 3. If there is no match it should exit.*
- 4. If there is a match it should display the string "Enter Password" and goes to next line*
- 5. Takes in password entered by the user and compares with password already stored in memory*
- 6. If there is no match it should exit'*
- 7. If there is a match it should display "Hello Username"*

CODE:-

```
.model tiny
.486
.data
str1    db    'Enter The Username $'
str3    db    0dh,0ah,'Enter The Password $'
disn1   db    0DH,0AH,'$'
username db 'dhairy0827'
password db 'XfCCIMkr'
max1    db    0bh
act1    db    ?
inp1    db    0ch dup('$')
        db    '$'
max2    db    09h
act2    db    ?
inp2    db    0ah dup('$')
str5    db    0dh,0ah,'Hello $'
dis3    db    '*'
.code
.startup
        lea    dx, str1
        mov    ah, 09h
        int    21h
        lea    dx, disn1
        mov    ah, 09h
        int    21h
        lea    DX, max1
        mov    AH, 0Ah
```

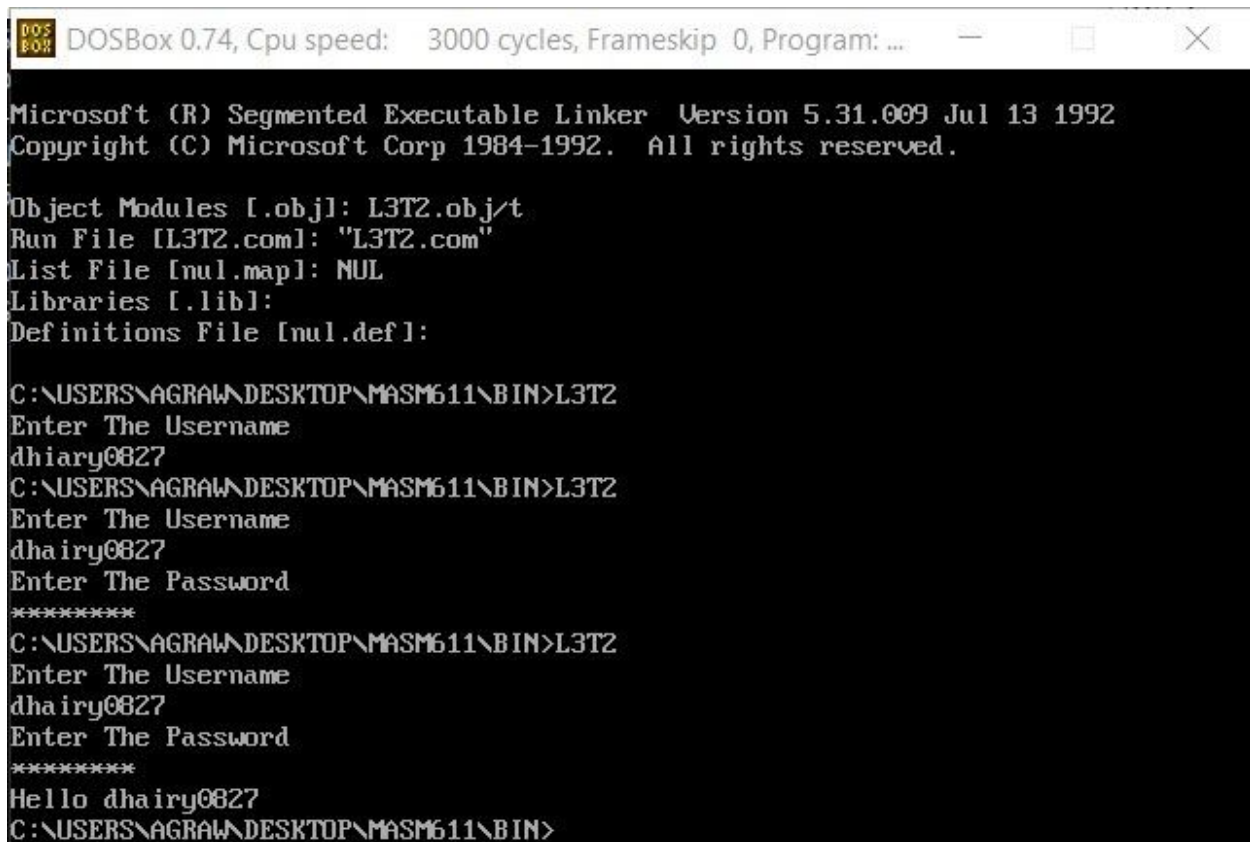
```

        INT    21h
        mov    cl,10
        lea    si,inp1
        lea    di,username
x1:     mov    al,[si]
        cmp    al,[di]
        jne    x5
x2:     inc    si
        inc    di
        dec    cl
        jnz    x1
        ;Enter Password display
        lea    dx,str3
        mov    ah,09h
        int    21h
        lea    dx,disn1
        mov    ah,09h
        int    21h
        ;input password
        lea    di,inp2
        mov    cx,08
x7:     mov    ah,08h
        int    21h
        stosb
        mov    di,dis3
        mov    ah,02h
        int    21h
        loop   x7
        mov    cl,8
        lea    si,inp2
        lea    di,password
x3:     mov    al,[si]
        cmp    al,[di]
        jne    x5
x4:     inc    si
        inc    di
        dec    cl
        jnz    x3
        lea    dx,str5
        mov    ah,09h
        int    21h
        lea    dx,inp1
        mov    ah,09h
        int    21h
x5:
.exit

```

end

ScreenShot



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

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Object Modules [.obj]: L3T2.obj/t
Run File [L3T2.com]: "L3T2.com"
List File [nul.map]: NUL
Libraries [.lib]:
Definitions File [nul.def]:

C:\USERS\AGRAW\DESKTOP\MASM611\BIN>L3T2
Enter The Username
dhairy0827
C:\USERS\AGRAW\DESKTOP\MASM611\BIN>L3T2
Enter The Username
dhairy0827
Enter The Password
*****
C:\USERS\AGRAW\DESKTOP\MASM611\BIN>L3T2
Enter The Username
dhairy0827
Enter The Password
*****
Hello dhairy0827
C:\USERS\AGRAW\DESKTOP\MASM611\BIN>
```

Explanation :-

The Screenshot attached shows 3 sets of inputs.

USERNAME- "dhairy0827" , Password - "XfCCIMkr"

The first one being the input with wrong username hence code exit

The second one being the correct username but wrong password hence code exit

The Third one with all the correct username and password and hence displays the message "Hello username(dhairy0827)" in the next line.

We can see the password is hidden with "" character for every input keystroke which was required*