

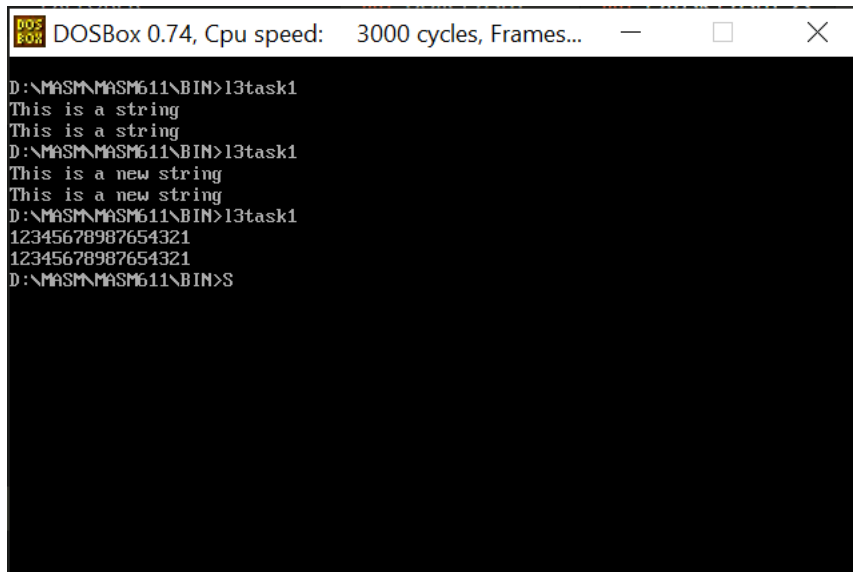
TASK 1

CODE:

```
[10] l3task1.asm
1  .model tiny
2  .data
3
4  strmax db 21
5  stract db ?
6  strdata db 22 dup('$')
7
8  newline db 0dh, 0ah, '$'
9
10 .code
11 .startup
12     ;get 20 letter string
13     lea dx, strmax
14     mov ah, 0ah
15     int 21h
16
17     ;go to new line
18     lea dx, newline
19     mov ah, 09h
20     int 21h
21
22     ;display the entered string
23     mov cl, stract
24     lea si, strdata
25 x1: mov dl, [si]
26     mov ah, 02h
```

```
[10] l3task1.asm
27     int 21h
28     inc si
29     dec cl
30     jnz x1
31 .exit
32 end
```

RUNNING ON DOSBOX:



```
DOSBox 0.74, Cpu speed: 3000 cycles, Frames... — □ ×  
D:\MASM\MASM611\BIN>13task1  
This is a string  
This is a string  
D:\MASM\MASM611\BIN>13task1  
This is a new string  
This is a new string  
D:\MASM\MASM611\BIN>13task1  
12345678987654321  
12345678987654321  
D:\MASM\MASM611\BIN>S
```

TASK 2

CODE:

```
[a8] l3task2.asm
1  .model tiny
2  .data
3
4  disp1 db "Enter User Name", 0dh, 0ah, '$'
5  disp2 db 0dh, 0ah, "Enter Password", 0dh, 0ah, '$'
6  disp3 db 0dh, 0ah, "Hello ", '$'
7
8  db_uname db "Rohit"
9  db_pass db "flash"
10
11  uname_mx db 9
12  uname_at db ?
13  uname_dt db 9 dup('$')
14
15  pass_dat db 5 dup('$')
16
17  .code
18  .startup
19      ;display "Enter User Name"
20      lea dx,disp1
21      mov ah,09h
22      int 21h
23
24      ;get user name
25      lea dx,uname_mx
26      mov ah,0ah
```

```
[a8] l3task2.asm
27      int 21h
28
29      ;check user name with user name in memory
30      mov cl,uname_at
31      mov ch,0h
32      lea si,uname_dt
33      lea di,db_uname
34      cld
35      repe cmpsb
36      cmp cx,0h
37      jnz x1
38
39      ;display "Enter Password"
40      lea dx,disp2
41      mov ah,09h
42      int 21h
43
44      ;get password byte-by-byte and display * in terminal
45      lea si,pass_dat
46      mov cl,5
47  x2: mov ah,08h
48      int 21h
49      mov [si],al
50      mov dl,'*'
51      mov ah,02h
52      int 21h
```

```

[61] l3task2.asm
53     inc si
54     dec cl
55     jnz x2
56
57     ;check password with password in memory
58     mov cl,5
59     mov ch,0h
60     lea si,pass_dat
61     lea di,db_pass
62     cld
63     repe cmpsb
64     cmp cx,0h
65     jnz x1
66
67     ;display "Hello <User_Name>" if password is correct
68     lea dx,disp3
69     mov ah,09h
70     int 21h
71     lea dx,uname_dt
72     mov ah,09h
73     int 21h
74
75     ;terminate if either username or password does not match with memory
76 x1:
77     .exit
78     end

```

RUNNING ON DOSBOX:

1. In the first execution, correct User Name and Password are given
[Correct user Name – Rohit, Correct Password – flash]
2. In the next execution, wrong User Name is given
3. In the last execution, wrong Password is given

```

DOSBox 0.74, Cpu speed: 3000 cycles, Frames...
D:\MASM\MASM611\BIN>l3task2
Enter User Name
Rohit
Enter Password
*****
Hello Rohit
D:\MASM\MASM611\BIN>l3task2
Enter User Name
random
D:\MASM\MASM611\BIN>l3task2
Enter User Name
Rohit
Enter Password
*****
D:\MASM\MASM611\BIN>S_

```