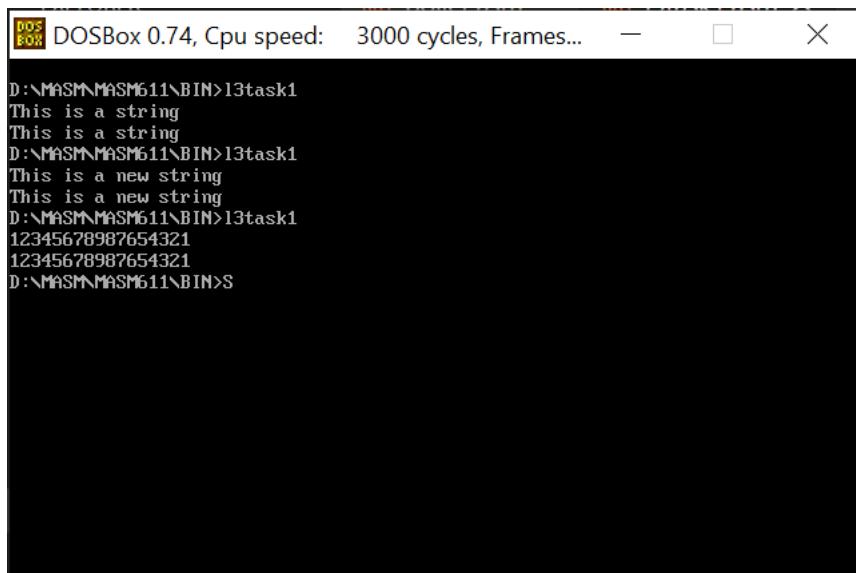


TASK 1

CODE:

```
[19] 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
```

```
[20] 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... — X

```
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:

```
[8] I3task2.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
```

```
[8] I3task2.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
```

```
[8] I3task2.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... — X
D:\MASM\MASM611\BIN>I3task2
Enter User Name
Rohit
Enter Password
*****
Hello Rohit
D:\MASM\MASM611\BIN>I3task2
Enter User Name
random
D:\MASM\MASM611\BIN>I3task2
Enter User Name
Rohit
Enter Password
*****
D:\MASM\MASM611\BIN>S_
```