

```

1  %macro scall 4
2      mov eax,%1
3      eax
4      mov ebx,%2
5      ebx
6      mov ecx,%3
7      ecx
8      mov edx,%4
9      edx
10     int 80h
11     %endmacro
12
13 section .data
14     m1 db 10d,13d,"Enter a string: "
15     l1 equ $-m1
16     m2 db 10d,13d,"Entered String: "
17     l2 equ $-m2
18     m3 db 10d,13d,"Length: "
19     l3 equ $-m3
20
21 section .bss
22     buffer resb 50
23     size equ $-buffer
24     count resd 1
25     dispnum resb 8
26
27 section .text
28     global _start
29     _start:
30         scall 4,1,m1,l1
31         scall 3,0,buffer,size
32         mov [count],eax
33         scall 4,1,m2,l2
34         scall 4,1,buffer,[count]
35         scall 4,1,m3,l3
36
37         mov esi,dispnum+7
38         mov eax,[count]
39         mov ecx,8
40         dec eax
41         UP1:
42             mov edx,0
43             mov ebx,10
44             div ebx
45             add dl,30h
46             mov [esi],dl
47             dec esi
48             loop UP1
49
50             scall 4,1,dispnum,8
51
52             mov eax,1
53             mov ebx,0
54             int 80h

```

;macro declaration with 4 parameters  
;1st parameter has been moved to  
  
;2nd parameter has been moved to  
  
;3rd parameter has been moved to  
  
;4th parameter has been moved to  
  
;Call the Kernal  
;end of macro  
;.data begins here  
;m1 variable initialised with string  
;l1 stores length of string m1  
;m2 variable initialised with string  
;l2 stores length of string m2  
;m3 variable initialised with string  
;l3 stores length of string m3  
  
;.bss begins here  
;buffer array of size 50  
;size variable to have input  
;to store size of buffer  
;to display 8 digit length  
  
;.text begins here  
;moving to \_start label  
;\_start label  
;macro call to display m1  
;macro call to input buffer  
;length of buffer gets stored in count  
;macro call to display m2  
;macro call to display buffer  
;macro call to display m3  
  
;esi points to 8th location of dispnum  
;eax now stores value of count  
;ecx gets initialaised with 8  
;decrement the value of eax  
;UP1 label  
;edx gets initiaised with 0  
;ebx gets initialised with 10  
;divide the contents of eax by ebx  
;add 30 to the remainder  
;dl content gets copied at esi  
;decrement esi  
;jump to UP1 till ecx becomes 0  
  
;macro call to display dispnum array  
  
;sys\_exit function  
;Sucessful Termination  
;Call the Kernal