

SYSTEM PROGRAMMING LAB

LAB 1

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BT19CS031

CSE, IV SEM

Q2.> Modify the question 1 program to allow users to enter the name and enrolment number.

section .data

msg1 db "Enter your Name? ",0xA,0xD

len1 equ \$ - msg1

msg2 db "Enter your Enrollment Number: ",0xA,0xD

len2 equ \$ - msg2

msg3 db "Your name is ",

len3 equ \$ - msg3

msg4 db "Your enrollment number is "

len4 equ \$ - msg4

section .bss

name resb 30

Eroll resb 10

section .text

global _start

_start:

;sequence :

*msg1 -> setname -> msg2 -> setroll -> msg3 -> getname
-> msg4 -> getroll*

;Printing "What is your Name? "

<i>mov</i> <i>eax</i> , 4	<i>;message length</i>
<i>mov</i> <i>ebx</i> , 1	<i>;file descriptor (stdout)</i>
<i>mov</i> <i>ecx</i> , <i>msg1</i>	<i>;message what to print</i>
<i>mov</i> <i>edx</i> , <i>len1</i>	<i>;length of the message</i>
<i>int</i> 80h	<i>;call kernel</i>

;Read and Store "User Name"

<i>mov</i> <i>eax</i> , 3	<i>;message is read</i>
<i>mov</i> <i>ebx</i> , 2	<i>;value is to be inserted</i>
<i>mov</i> <i>ecx</i> , <i>name</i>	<i>;name is entered</i>
<i>mov</i> <i>edx</i> , 30	<i>;length of the 'name'</i>
<i>int</i> 80h	<i>;call kernel</i>

;Asking user to enter enrollment number

<i>mov</i> <i>eax</i> , 4	<i>;message length</i>
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mov ebx, 1 ;file descriptor (stdout)

mov ecx, msg2 ;stating what to print

mov edx, len2 ;length of the message

int 80h ;call kernel

;Read and Store "User Identity Number"

mov eax, 3 ;message is read

mov ebx, 2 ;value is to be inserted

mov ecx, Eroll ;enrollment number is entered

mov edx, 10 ;length of the Eroll

int 80h ;call kernel

;Printing "Your name is "

mov eax, 4 ;message length

mov ebx, 1 ;file descriptor (stdout)

mov ecx, msg3 ;stating what to print

mov edx, len3 ;length of the message

int 80h ;call kernel

;printing "User Name"

```
mov eax, 4           ;message length  
mov ebx, 1           ;file descriptor (stdout)  
mov ecx, name       ;stating what to print  
mov edx, 30          ;length of the 'name'  
int 80h              ;call kernel
```

;Printing "Your Enrollment number is "

```
mov eax, 4           ;message length  
mov ebx, 1           ;file descriptor (stdout)  
mov ecx, msg4       ;stating what to print  
mov edx, len4       ;length of the message  
int 80h              ;call kernel
```

;Read and Store "User Enrollment Number"

<i>mov</i> <i>eax</i> , 4	<i>;message length</i>
<i>mov</i> <i>ebx</i> , 1	<i>;file descriptor (stdout)</i>
<i>mov</i> <i>ecx</i> , <i>Eroll</i>	<i>;stating what to print</i>
<i>mov</i> <i>edx</i> , 10	<i>;length of the 'roll'</i>
<i>int</i> 80h	<i>;call kernel</i>
	<i>;exit code</i>
<i>mov</i> <i>eax</i> , 1	
<i>mov</i> <i>ebx</i> , 0	
<i>int</i> 80h	

output

ubuntu [Running] - Oracle VM VirtualBox

Activities Terminal Mar 29 16:11

niraj@niraj-VirtualBox: ~/Documents

```
niraj@niraj-VirtualBox:~/Documents$ nasm -f elf BT19CS031_lab-1_2.asm
niraj@niraj-VirtualBox:~/Documents$ ld -m elf_i386 -s -o BT19CS031_lab-1_2 BT19CS031_lab-1_2.o
niraj@niraj-VirtualBox:~/Documents$ ./BT19CS031_lab-1_2
What is your Name?
NIRAJ KUMAR
Enter your Enrollment Number:
BT19CS031
Your name is NIRAJ KUMAR
Your enrollment number is BT19CS031
niraj@niraj-VirtualBox:~/Documents$
```