

SYSTEM PROGRAMMING LAB

LAB 1

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BT19CS031

CSE, IV SEM

Q1.> Write a Assembly language program to print your name and enrolment number.

section .text

global _start ;must be declared for linker (ld)

_start: ;tells linker entry point

mov edx,len ;message length

mov ecx,msg ;message to write

mov ebx,1 ;file descriptor (stdout)

mov eax,4 ;system call number (sys_write)

int 0x80 ;call kernel

mov eax,1 ;system call number (sys_exit)

int 0x80 ;call kernel

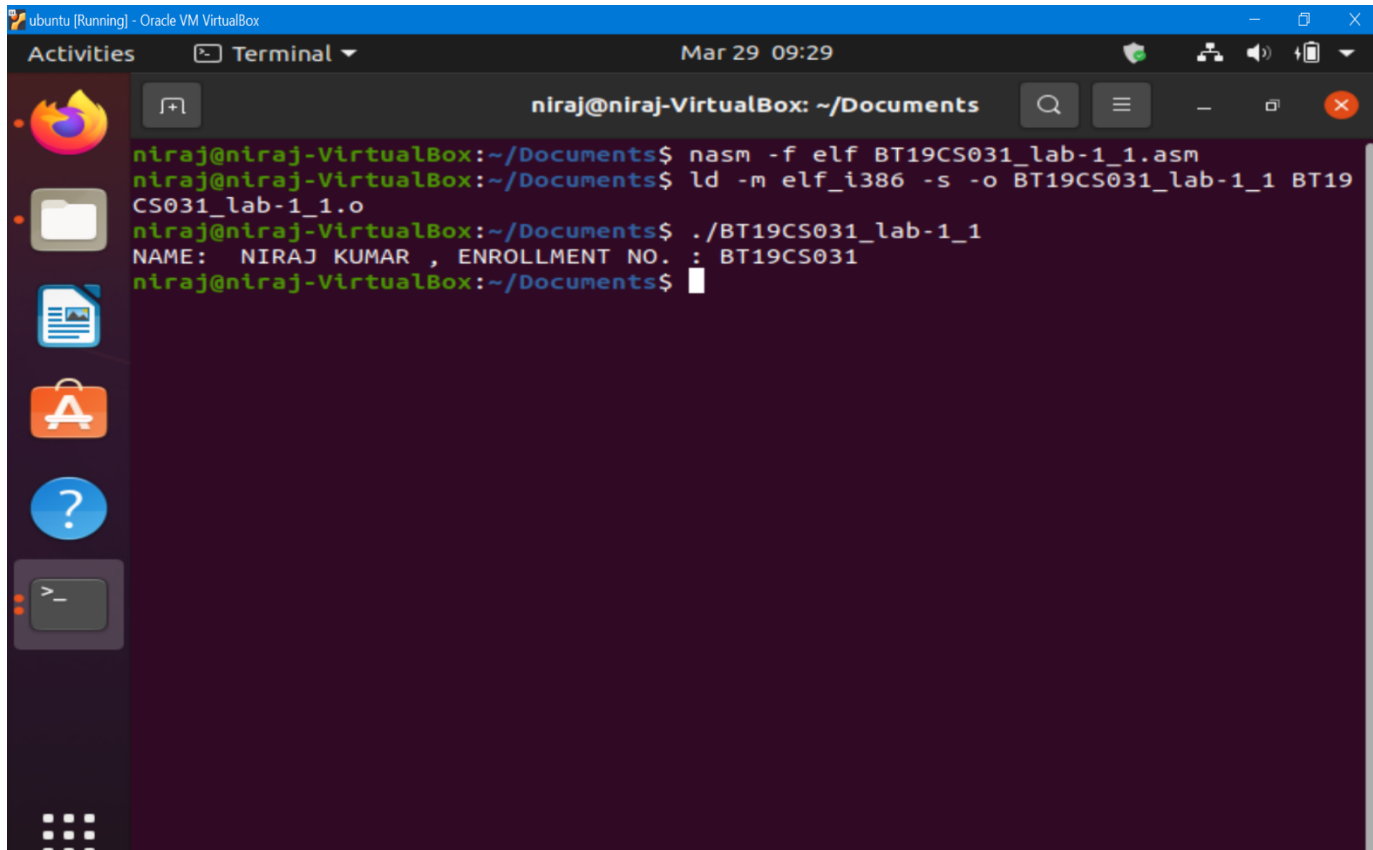
section .data

msg db 'NAME: NIRAJ KUMAR , ENROLLMENT NO. :

BT19CS031', 0xa ;string to be printed

len equ \$ - msg ;length of the string

output



The screenshot shows a terminal window titled "niraj@niraj-VirtualBox: ~/Documents" with a search bar and menu icons. The terminal output is as follows:

```
niraj@niraj-VirtualBox:~/Documents$ nasm -f elf BT19CS031_lab-1_1.asm
niraj@niraj-VirtualBox:~/Documents$ ld -m elf_i386 -s -o BT19CS031_lab-1_1 BT19CS031_lab-1_1.o
niraj@niraj-VirtualBox:~/Documents$ ./BT19CS031_lab-1_1
NAME: NIRAJ KUMAR , ENROLLMENT NO. : BT19CS031
niraj@niraj-VirtualBox:~/Documents$
```