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Roll No: P19-0045

BSCS (3B)

COAL (LAB) Task 9

In this code I am printing my name and roll number at the center of console of DosBox using 16bits.

CODE:

[org 0x0100]

jmp start

message: db 'Muhammad Affan Khan p19-0045'

length: dw 28

clrscr:

push es

push ax

push di

mov ax, 0xb800

mov es, ax

mov di, 0

nextloc:

mov word [es:di], 0x0720

add di, 2

cmp di, 4000

jne nextloc

pop di

pop ax

pop es

ret

printstr:

push bp

mov bp, sp

push es

push ax

push cx

push si

push di

mov ax, 0xb800

mov es, ax

mov di, 1980

mov si, [bp + 6]

mov cx, [bp + 4]

mov ah, 0x07 ; only need to do this once

nextchar:

mov al, [si]

mov [es:di], ax

add di, 2

add si, 1

; dec cx

; jnz nextchar

; alternatively

loop nextchar

pop di

pop si

pop cx

pop ax

pop es

pop bp

ret 4

start:

call clrscr

mov ax, message

push ax

push word [length]

call printstr

; wait for keypress

mov ah, 0x1 ; input char is 0x1 in ah

int 0x21

mov ax, 0x4c00

int 0x21

