IBM19CS195 11-11-20

LAB 4 → To check whether an input string is Pallindrome / not.

```
.model small
display macro msg
lea dx, msg
mov ah, 09h
int 21h
endm

.data
msg1 db 0dh, 0ah, "enter a string :- $"
msg2 db 0dh, 0ah, "entered string is Pallindrome $"
msg3 db 0dh, 0ah, "entered string is not a Pallindrome$"
str db 10h dup (0)
revstr db 10h dup (0)
len dw 0

.code
mov ax, @data
mov ds, ax

display msg1
mov si, 00h

back1: mov ah, 01h ; input string :-> 9 for malayalam
int 21h

cmp al, 0dh
jz next

mov str[si], al
inc si
```

```
inc len
jmp back1

next: mov si, 00h
mov di, 00h
add di, len          ; di = 00 + 09 = 9
dec di               ; di = 8 (Strings of length 9 means index (from 0 to 8)
mov cx, len          ; cx = 9

back2: mov al, str[si]      ; al <- str[00] = value 'm'
       mov revstr[di], al   ; revstr[8] = value 'm'
       inc si
       dec di
Loop back2

mov cx, len          ; cx = 9
mov si, 00h
mov di, 00h
cld
back3: mov bl, str[si]
       cmp bl, revstr[di]
       jnz notpali
       Loop back3
       display msg2
       jmp last.

notepatti notepali: display msg3
last. mov ah, 4ch
int 21h
end.
```