LAB PROGRAM - 4

11-11-20

```
.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
                   palindrome $"
msg3 db 0dh, 0ah, "entered string is not
                   a palindrome $"
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 ; malayalam ---->
                      input string where length = 9
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 = 09
dec di           ; di = 8 (string 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

notpali : display msg3
last    : mov ah, 4ch
          int 21h
          end
```