PALINDROME

11/11/20 Lab4, SUDESHNA BHUSHAN, 1BM19CS189

```
.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
move ax, @data
mov ds, ax

display msg1

mov si, 00h
```

```
back1: mov ah, 01h      ; malayalam --->
int 21h                   input string where
                          length = 9

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 (string of length 9
mov cx, len             ; cx = 9   means index from 0
                                   to 8)

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
```

— x — x — x —