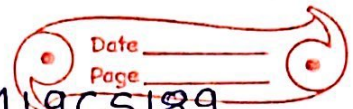


PALINDROME

11/11/20

Lab 4, SUDESHNA BHUSHAN, 18M19CS189



• 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)
xstr 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
jg 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]
mov rax[di], al ; = value 'm'
inc si ; rax[8] =
dec di value 'm'?

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 —