LAB PROGRAM-4

* model small

display macro msg
lea dx, msg
mov ah, 09h
int 21h
end m

. data

msg1 db 0dh, 0ah, "enter a string ; - $"
msg2 db 0dh, 0ah, "enter 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 msg,
mov si, 00h
back1: mov ah, 01h ; malayalam -)
                    input string where length = 9

int 21h

```asm
        cmp  al, odh
        J2   next
mov  str [si], al
        inc  si
        inc  len
        JMP  back

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] ; revstr [8] = value 'm'
         inc  si
         dec  di
      long back 2

   mov  cx, len ; cx = 9
      mov  si, 00h
   mov  di, 00h
    cld.
back 3: mov  bl, str [si]
      cmp  bl, revstr [di]
        Jh2  notpal
       loop back 3
       display msg2
       JMP last
```

```
not pali : display msg 3
last    : mov ah, 4ch
    int 21h
    end.
```