MP-LAB

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3D - SECTION

Program - 4

```
.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 plindrome $"
 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

back 1: mov ah, 01h
 int 21h

cmp al, 0dh
 jz next
```

```
mov str [Si], al
 inc Si
 inc len
 jmp back 1
 next : mov Si, 00h
  mov di, 00h
  add di, len
  dec di
  mov cx, len
  back 2: mov al, str [Si]
          mov revstr [di], al
          inc si
          dec di
  loop back 2
  mov cx, len
   mov si, 00h
   mov di, 00h
   cld
  back 3 : mov bl, str [si]
            cmp bl, revstr [di]
             jnz notpali
             loop back 3
             display msg2
              jmp last
    notpali : display msg 3
     last : mov ah, 4ch
      int 21h
      end
```