

.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)
newstr db 10h dup(0)
len dw 0
```

.code

```
mov     ax, @data
mov     ds, ax
```

display msg1

```
mov     si, 00h
back1:  mov     ah, 0ah
    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  
      dec di  
      mov cx, len
```

```
back2: mov al, str[si]  
      mov newstr[di], al  
      inc si  
      dec di
```

```
loop back2
```

```
mov cx, len  
mov si, 00h  
mov di, 00h  
cld
```

```
back3: mov bl, str[si]  
      cmp bl, newstr[di]  
      jnz notpali  
      display msg2  
      jmp last
```

```
notpali: display msg3
```

```
last: mov ah, 4ch  
      int 21h  
      end.
```