

# CAB-4 - checking of Palindrome

.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 <math>\xi</math>"

msg3 db 0dh, 0ah, "entered string is not a palindrome <math>\xi</math>"

str db 10h dup(0)

nextstr db 10h dup(0)

len dw 0

.code

mov ax, @data

mov ds, ax

display msg1

mov si, 00h

back1: mov ah, 01h

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

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back2: mov al, str[si]
      mov revstr(di), al
      inc si
      dec di
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loop back2
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mov cx, len
mov si, 00h
mov di, 00h
cld
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back3: mov bl, str[si]
      cmp bl, revstr(di)
      jnz notpali
      loop back3
      display msg msg2
      jmp last
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notpali: display msg3
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last: mov ah, 4ch
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int 21h
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end
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