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3-D

IBMIACSA02

### PROG 4. ASM (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 \$"

msg3 db 0dh, 0ah, "Entered string is not Palindrome \$"

str db 10h dup(0)

rev str 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

back2: mov al, str[si]

mov revstr[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, revstr[di]

jnz notpali

loop back3

display msg2

jmp last

notpali: disp msg3

last: mov ah, 4ch

int 21h

eret

Fantastic