

Enter a string and check whether the string is
Palindrome or not.

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(LAB PROGRAM)

• MODEL SMALL

DISPLAY MACRO MSG

LEA DX, MSG

MOV AH, 09H

INT 21H

ENDM

• DATA

MSG1 DB 0DH, 0AH, "ENTER STRING: \$"

MSG2 DB 0DH, 0AH, " REVERSE STRING: \$"

MSG3 DB 0DH, 0AH, " INPUT STRING IS PALINDROME. \$"

MSG4 DB 0DH, 0AH, " INPUT STRING IS ^{NOT} ~~NOT~~ A PALINDROME STRING. \$"

STRING DB 80H DUP(?)

RESTRING DB 80H DUP(?)

• CODE

START: MOV AX, @DATA

MOV DS, AX

DISPLAY MSG1

; TAKE THE STRING FROM KEYBOARD CHARACTER BY
CHARACTER

MOV SI, OFFSET STRING

XOR CL, CL

AGAIN: MOV AH, 01H

INT 21H

CMP AL, 0DH

JE NEXT

MOV [SI], AL

INC SI

INC CL

JMP AGAIN

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NEXT: MOV [SI], BYTE PTR '$' ; STRING INPUT OVER...
      DEC SI
      MOV CH, CL ; REVERSE THE STRING AND STORE IN RSTRING
      MOV DI, OFFSET RSTRING
BACK:  MOV AL, [SI]
      MOV [DI], AL
      DEC SI
      INC DI
      DEC CH
      JNZ BACK
      MOV [DI], BYTE PTR '$'
      DISPLAY MSG2
      DISPLAY RSTRING
      MOV SI, OFFSET STRING
      MOV DI, OFFSET RSTRING
AG:    MOV AL, [SI]
      CMP AL, [DI]
      JNE FAIL
      INC SI
      INC DI
      DEC CX
      JZ SUCCESS
      JMP AG
FAIL:  DISPLAY MSG4
      JMP FINAL
SUCCESS: DISPLAY MSG3
FINAL: MOV AH, 4CH
      INT 21H
END

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