PALINDROME CHECKER

```asm
. MODEL SMALL
. DATA
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)
REVSTR 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
```

```asm
        INC LEN
        JMP BACK1


NEXT:   MOV SI, OOH
        MOV DI, OOH
        ADD DI, LEN
        DEC DI
        MOV CX, LEN


BACK2:  MOV AL, STR[SI]
        MOV REVSTR [DI], AL
        INC SI
        MOV RE DEC DI
        LOOP BACK2


        MOV CX, LEN
        MOV SI, OOH
        MOV DI, OOH
        CLD


BACK3:  MOV BL, STR [SI]
        CMP BL, REVSTR [DI]
        JNZ NOTPALI
        LOOP BACK3
        DISPLAY MSG2
        JMP LAST


NOTPALI:  DISPLAY MSG3
LAST:   MOV AH, 4CH
        INT 21H
        END
```