Palindrome or not   Name - TUSHAR PAI
        Lab program - 4   USN - 1BM19CS174

.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 a palindrome $"
MSG3 DB 0DH, 0AH, "Entered string is not a palindrome $"
STR. DB 10H DUP(0)
~~STR~~ 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
        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 : DISPLAY MSG3
        LAST :  MOV  AH, 4CH
                INT  21H
                END
```