```
1
     DATA SEGMENT
       MSG1 DB 10,13,"ENTER THE STRING TO check for pal $"
MSG2 DB 10,13,"ENTERED STRING IS $"
MSG3 DB 10,13,"STRING REVERSE IS $"
MSG4 DB 10,13,"STRING IS PAL $"
MSG5 DB 10,13,"STRING IS NOT PAL $"
 2
 3
 4
 5
 6
        MSG6 DB 10,13,"LENGTH OF STRING IS $"
 7
 8
        P1 LABEL BYTE
 9
        M1 DB 0FFH
10
        L1 DB ?
        P11 DB OFFH DUP('$')
11
        P22 DB 0FFH DUP('$')
12
13
     DATA ENDS
14
15
     DISPLAY MACRO MSG
16
         MOV AH,9
17
         LEA DX, MSG
18
         INT 21H
19
     ENDM
20
     CODE SEGMENT
21
22
         ASSUME CS:CODE,DS:DATA
23
         START:
24
                MOV AX, DATA
25
                MOV DS, AX
26
27
                DISPLAY MSG1
28
29
                LEA DX,P1
30
                MOV AH, OAH
31
                INT 21H
32
33
                DISPLAY MSG2
34
                DISPLAY P11
35
                DISPLAY MSG6
36
37
                MOV DL,L1
38
                ADD DL,30H
39
                MOV AH, 2
                INT 21H
40
41
42
                DISPLAY MSG3
43
44
                LEA SI,P11
45
                LEA DI, P22
46
                MOV DL,L1
47
                DEC DL
                MOV DH, 0
48
49
                ADD SI, DX
50
                MOV CL, L1
51
                MOV CH, 0
52
53
                REVERSE:
54
                   MOV AL, [SI]
                   MOV [DI],AL
55
                    INC DI
56
                   DEC SI
57
                    LOOP REVERSE
58
59
                DISPLAY P22
60
61
                LEA SI,P11
                LEA DI, P22
62
63
64
                MOV CL,L1
65
                MOV CH, 0
```

File: pal.asm Page 2 of 2

```
66
               CHECK:
67
                   MOV AL,[SI]
CMP [DI],AL
JNE NOTPAL
INC DI
68
69
70
71
72
                    INC SI
73
                    LOOP CHECK
                    DISPLAY MSG4
74
75
                JMP EXIT
76
                NOTPAL:
                    DISPLAY MSG5
77
78
                EXIT:
79
                 MOV AH,4CH
                 INT 21H
80
81
     CODE ENDS
82
83
     END START
```