LAB-3

Palindrome

```
.MODEL SMALL
DISPLAY MACRO MSG
LEA DX, MSG
MOV AH, 09H
INT 21H
ENDM
.DATA
MSG1 DB 0DH, 0AH
MSG2 DB 0DH, 0AH
MSG3 DB 0DH, 0AH
MSG4 DB 0DH, 0AH
STRING DB 80H DUP (?)
RSTRING DB 80H DUP (?)
.CODE
START: MOV AX, @DATA
       MOV DS, AX
       DISPLAY MSG1
       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
NEXT :  MOV  [SI],BYTE PTR
        DEC  SI
        MOV  CH,CL
        [redacted]
        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  DI
        DEC  CX
        JZ   SUCCESS
        JMP  AG
```

```
FAIL:   DISPLAY MSG4
        JMP FINAL
SUCCESS: DISPLAY MSG3
FINAL:  MOV .AH, 4CH
        INT 21H
END.
```