Lab Experiment 4 ; String Comparision

```
.MODEL SMALL
DISPLAY MACRO MSG1
        LEA DX, MSG1
        MOV AH, 09H
        INT 21H
    ENDM
.DATA
MSG1 DB  0DH, 0AH," ENTER FIRST STRING : $"
MSG2 DB  0DH, 0AH," ENTER SECOND STRING : $"
MSG3 DB  0DH, 0AH," LENGTH OF FIRST STRING : $"
MSG4 DB  0DH, 0AH," LENGTH OF SECOND STRING: $"
MSG5 DB  0DH, 0AH," --- STRINGS ARE EQUAL--- $"
MSG6 DB  0DH, 0AH," --- STRINGS ARE NOT EQUAL-- $"
STRING1 DB 80H DUP (?)
STRING2 DB 80H DUP (?)
.CODE
START : MOV AX, @DATA
        MOV DS, AX
        DISPLAY MSG1
        MOV SI, OFFSET STRING1
        CALL READSTR
        MOV BL, CL
        DISPLAY MSG2
        MOV SI, OFFSET STRING2
        CALL READSTR
        PUSH BX
        PUSH CX
        DISPLAY MSG3
        MOV AL, BL
        CALL LENDIS
        POP CX
        POP BX
        CMP CL, BL
        JNE FAIL
        MOV SI, OFFSET STRING1
        MOV DI, OFFSET STRING2
        CLD
CHK:    MOV AL, [SI]
        CMP AL, [DI]
        JNE FAIL
```

```
        INC SI
        INC DI
        DEC CL
        JNZ CHK
        DISPLAY MSG15
        JMP FINAL
LENDIS  PROC NEAR
        XOR AH, AH
        ADD AL, 00H
        AAM
        ADD AX, 3030H
        MOV BH, AL
        MOV DL, AH
        MOV AH, 02H
        INT 21H
        MOV DL, BH
        MOV AH, 02H
        INT 21H
        RET
LENDIS  ENDP
READSTR PROC NEAR
        XOR CL, CL
BACK:   MOV AH, 01H
        INT 21H
        CMP AL, 0DH
        JE FINISH
        MOV [SI], AL
        INC SI
        INC CL
        JMP BACK
FINISH: MOV[SI], BYTE PTR '$'
        RET
READSTR ENDP
FAIL:   DISPLAY MSG16
FINAL:  MOV AH, 4CH
        INT 21H
END START
```