

* COMPARE STRING\$:

.model small

```
DISPLAY MACRO MSG  
    LEA DX, MSG  
    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 string 1 $"   
MSG4 DB 0DH, 0AH, "Length of string 2 $"   
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 LEN-DIS
 DISPLAY MSG4
 MOV AL, CL
 CALL LEN-DIS
 POP CX
 POP BX
 CMP CL, BL
 JNE FAIL
 MOV SI, OFFSET STRING1
 MOV DI, OFFSET STRING2
 CLD

CHK : MOV AL, [SI]

~~MOV~~

CMP AL, [DI]

JNE FAIL

JNC SI

JNE DI

DEC CL

JNZ CHK

DISPLAY MSG5

JMP FINAL


```

LEN_DJS    PROC NEAR
            XOR BH, 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
LEN_DJS    ENDP

```

```

READSTR    PROC NEAR
            XOR CL, CL

```

```

BACK :     MOV AH, 01H
            INT 21H

```

```

            CMP AL, 0DH

```

```

            JE FINISH

```

```

            MOV [SI], AL

```

```

            JNC SI

```

```

            JNC CL

```

```

            JMP BACK

```

```

FINISH :   MOV [SI], BYTE PTR '$'
            RET

```

```

READSTR    ENDP

```

FAIL : DISPLAY MSG6
 MOV AH, 4CH
 JNT 21H

END START

* DISPLAY SYSTEM TIME ↴

.model small

DISPLAY MACRO MSG
 LEA DX, MSG
 MOV AH, 09H
 JNT 21H

ENDM

.DATA

MSG1 DB 0D0H, 0BH, "The Time is \$ "

.code

MOV AX, @DATA
 MOV DS, AX

MOV AH, 02CH
 JNT 21H

CH → hour

CL → min

DH → sec

needs time from system

MOV AL, CH
AAM

MOV BX, AX

CALL DISP

MOV DL, ':'

MOV AH, 02H

JNT 21H

⓪ MOV DL, 20H
ASCII

display
characters one by one.

DL register on

MOV AL, CL

AAM

MOV BX, AX

CALL DISP

MOV DL, ':'

MOV AH, 02H

JNT 21H

MOV AL, DH

AAM

MOV BX, AX

CALL DISP

MOV AH, 02H

JNT 21H

DISP PROC NEAR

MOV DL, BH

ADD DL, 30H

MOV AH, 02H

JNT 21H

MOV ~~DL~~ DL, BL

ADD DL, 30H

MOV AH, 02H

JNT 21H

RET

DISP ENDP

END