

LAB 5

• model small

```
display macro msg  
    lea dx, msg  
    mov ah, 0ah  
    int 21h
```

ENDM

• data

```
msg1 db 0dh, 0ah, "enter the first string $"  
msg2 db 0dh, 0ah, "enter the second string $"  
msg3 db 0dh, 0ah, "length of the first string $"  
msg4 db 0dh, 0ah, "length of the second string $"  
msg5 db 0dh, 0ah, "strings are equal..."  
msg6 db 0dh, 0ah, "strings aren't 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 dx  
       push cx
```

```

display msg3
mov al,ld
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]
      cmp al,[DI]
      JNE Fail
      inc si
      inc di
      dec cl
      JNZ CHK
      display msg5
      JMP final

```

len-dis PROC near

```

xor ah,ah
add al,ah
AAM
add ax,3030h
mov bh,al
mov dl,ah
mov ah,02h
int 21h
mov DL,BH
mov ah,02h

```


uint 21

Ret

len-disp endp
readstr proc near
xor cl, cl

Back : mov ah, 01h
uint 21h
cmp al, 0dh
JE Finish
mov [SI], Al
inc SI
inc CL
JMP back

Finish : mov [SZ], byte ptr '\$'
Ret

readstr ENDP

Fail : display msg 6

Final : mov AH, 4Ch
uint 21h

END start

WAP to display the system Time.

Model small
code

Hours, Mins, Seconds

MOV AH, 2CH
INT 21H

H = CH this
M = CL step
S = DH does this

MOV AL, CH

AAM

MOV BX, AX

CALL DISP

MOV DL, ':'

MOV AH, 02H

INT 21H

MOV AL, CL

AAM

MOV BX, AX

CALL DISP

MOV DL, ':'

MOV AH, 02H

INT 21H

~~MOV AL, DH~~

~~AAM~~

~~MOV BX, AX~~

~~CALL DISP~~

~~MOV DL, ':'~~

~~MOV AH, 02H~~

~~INT 21H~~

MOV AL, DH

AAM

MOV BX, AX

CALL DISP

MOV AH, 4CH

INT 21H

DISP PROC NEAR

MOV DL, DH

ADD DL, 30H

MOV AH, 02H

INT 21H

MOV DL, BL

ADD DL, 30H

MOV AH, 02H

INT 21H

RET

DISP ENDP

END