# READ & DISPLAY SYSTEM TIME

```asm
. MODEL SMALL
DISPLAY MACRO MSG
    LEA DX, MSG
    MOV AH, 09H
    INT 21H
ENDM

. DATA
    TIME STR DB 020H DUP (?)
    MSG1 DB 'CURRENT TIME :: $'

. CODE
START :
    MOV AX, @DATA
    MOV DS, AX

    MOV AH, 00H             ; CLEAR SCREEN
    MOV AL, 03H
    INT 10H

AG:                        ; SET A particular location
    MOV BH, 00H
    MOV DH, 01H
    MOV DL, 01H
    MOV AH, 02H
    INT 10H

    MOV SI, OFFSET TIMESTR
    MOV AH, 2CH            ; INTERRUPT TO GET SYSTEM TIME
    INT 21H
    MOV AL, CH            ; CH= HOUR, CL=MINUTES, DH= SEC
    AAM                  ; CONVERT TO UNPACKED BCD FORMAT
```

```
ADD AX, 3030H        ; AX = 31 30   → AH = 31H, AL = 30H
MOV [SI], AH         ; TIMESTR [00] = 31 → IS DISPLAYED AS 1
INC SI
MOV [SI], AL         ; TIMESTR [01] = 30 → IS DISPLAYED AS 0
INC SI
MOV [SI], BYTE PTR ':'  ; '10:' IS DISPLAYED
INC SI


MOV AL, CL
AAM
ADD AX, 3030H
MOV [SI], AH
INC SI.
MOV [SI], AL
INC SI
MOV [SI], BYTE PTR ':'
INC SI


MOV AL, DH
AAM
ADD AX, 3030H
MOV [SI], AH
INC SI
MOV [SI], AL
INC SI
MOV [SI], BYTE PTR '$'  ; TO INDICATE END OF TIME STR
DISPLAY MSG1
DISPLAY TIMESTR        ; DISPLAY TIME
```

```
        MOV AH, 0BH
        INT 21H
        CMP AL, 0DH 00H
        JE AG

FINAL:
        MOV AH, 4CH
        INT 21H

END START
```