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Q.

```
; PROGRAM :: READ THE CURRENT TIME FROM THE SYSTEM AND DISPLAY IT IN THE STANDARD FORMAT ON THE SCREEN

.MODEL SMALL

DISPLAY MACRO MSG
        LEA DX, MSG
        MOV AH, 09H
        INT 21H
ENDM

.DATA
TIMESTR DB 020H DUP(?)
MSG1    DB "CURRENT TIME :: $"

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

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

;SET A PARTICULAR LOCATION FOR DYNAMIC CLOCK

AG:     MOV BH, 00H
        MOV DH, 01H
```

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```
MOV DL, 01H
MOV AH, 02H
INT 10H

MOV SI, OFFSET TIMESTR  ; LEA SI, TIMESTR
MOV AH, 2CH             ; INTERRUPT FOR GETTING
INT 21H                   SYSTEM TIME
MOV AL, CH              ; CH=HOUR, CL=MINUTES, DH=SECOND
AAM ; CONVERT TO UNPACKED BACD FORMAT -- AAM
ADD AX, 3030H ; AX=31 30 --> AH=31H AND AL=30H
MOV [SI], AH  ; TIMESTR[00]=31 => WILL BE DISPLAYED AS 1
INC SI
MOV [SI], AL  ; TIMESTR[01]=30 => WILL BE DISPLAYED AS 0
INC SI
MOV [SI], BYTE PTR ':'  ; DISPLAYED ON THE
INC SI                    SCREEN NOW IS 10:

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

IS USED AND CH CONTAINS 10

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```
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 THE
                              TIME STRING
DISPLAY MSG1
DISPLAY TIMESTR             ; DISPLAY THE TIME

; CHECK FOR THE KEYBOARD STATUS ...
; IF KEY IS PRESSED, TERMINATE THE PROGRAM..

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

FINAL: MOV AH, 4CH
       INT 21H

END START
```

— X —

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