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IBM19CS178

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
    END

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

    · CODE

START :    MOV  AX  @ DATA
           MOV  DS, AX

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

; SET A PARTICULAR LOCATION  FOR DYNAMIC CLOCK

AG:        MOV EH, 00H
           MOV DH, 01H
           MOV DL, 01H
           MOV AH, 02H
           INT 10H
```

```asm
MOV SI, OFFSET TIMESTR ; LEA  SI, TIME STR
MOV AH, 2CH        ; INTERRUPT  FOR
                        GETTING  SYSTEM  TIME

    INT 21H
    MOV AL, CH    ; CH = HOUR,  CL = MINUTES,
                        DH = SECOND

AAM ; CONVERT  TO   UNPACKED  BACK  FORMAT
                -- AAM IS USED  AND CH CONTAINS
            THE VALUE 10

ADD  AX,  3030H ; AX = 31  30 -->
                  AH = 31H   AND   AL = 30H
MOV [SI] AH  ; TIME STR [00] = 31  ->
            WILL BE  DISPLAYED A SI

    INC SI
    MOV [SI], AL ; TIME STR [01] = 30 -->
                    WILL BE  DISPLAYED AS O

    INC SI
    MOV [SI], BYTE PTR ':'  ; DISPLAYED  ON
                    THE SCREEN NOW IS 10:

    INC  SI
```

```asm
        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, 0H
        AAM
    ADD AX, 3030H
        MOV[SI],AH
        INC SI
        INC SI
        MOV[SI] BYTE PTR '$'; TO INDICATE
                    END OF THE TIME STRING

            DISPLAY MSG1
            DISPLAY TIMESTR   ; DISPLAY THE TIME---
    ; CHECK FOR THE KEYBORAD STATUB ---
    ; 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

INT 21H

END START