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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 AX, 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

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; SET A PARTICULAR LOCATION FOR DYNAMIC CLOCK

AGI :
MOV BH, 00H
MOV DH, 01H
MOV DL, 01H
MOV AH, 02H
INT 10H

MOV SI, OFFSET TIME STR; LEAST TIME STR
MOV AH, 2CH; INTERRUPT for getting system time
INT 21H
MOV AL, CH; CH = HOUR, CL = MINUTES
DH = SECONDS

AAM; Convert to unpacked BCD format -- A is used and CH contains 10
AAD 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 screen now is 10:
INC SI

MOV AL, CL
AAM
AAD AX, 3030H
MOV [SI], AH
INC SI

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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 '\$'

DISPLAY MSG1

DISPLAY TIMESTR

; check for the keyboard status
; If key is pressed, terminate the program.

MOV AH, 0BH

INT 21H

CMP AL, 0DH

JE AG

FINAL: MOV AH, 4CH

INT 21H

END START