

## MP-MC LAB PROG 8

Date 17/11/20  
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Read 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

MOV DL, 01H

MOV AH, 02H

INT 10H

MOV SI, OFFSET TIMESTR ; LEA SI, TIMESTR

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 → AAM is used and CH reg contains 10

ADD AX, 3030H ; AX = 31 30 → AH=31H and AL=30H

MOV [SI], AH ; TIMESTR[00]=31 → displayed as 1

INC SI

MOV [SI], AL ; TIMESTR[01]=30 → displayed as 0

INC SI

MOV [SI], BYTE PTR ':' ; displayed on screen now as 10:

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 line string

DISPLAY MSG1

DISPLAY TIMESTR

; Check for keyboard status

; If Key is pressed terminate the program

MOV AH, 0BH

INT21H

CMP AL, 00H

JE AG

FINAL : MOV AH, 4CH

INT21H

END START