

⇒ Program to 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 M

• 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 TIME STR ; LEA SI, TIME STR
 MOV AH, 2CH ; Interrupt for getting system Time
 INT 21H

MOV AL, CH ; CH = hour, CL = minute, DH = second
 AAM; Convert to unpacked BCD format -- AAM is
 used AND CH contains 10 → 01 00

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

MOV [SI], AH ; TIME STR[00] = 31 → will be displayed
 as 1

INC SI

MOV [SI], AL ; TIME STR[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

MOV AL, DH

AAM

ADD AX, 3030H

MOV [SI], AH

INC SI

MOV [SI], AL

INC SI

MOV [SI], BYTE PTR '\$' ; To indicate the 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