Batch-1 `3D`   Varsha·S 1BM19CS179   Date 17/11/20

Expt. No. _____   LAB - 8   Page No. _____

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
EDDM

. 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

Teacher's Signature : _____

```
A6: 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 = SECOND.
    AAM ; CONVERT TO UNPACKED BACD FORMAT
        --AAM IS USED AND CH CONTAINS 10

    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
```

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

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


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

DISPLAY MSG 1
DISPLAY TIMESTR        ; DISPLAY THE
                       ; TIME...
; CHECK FOR THE KEYBOARD STATUS....
```

```
; IF KEY IS PRESSED, TERMINATE THE
                                  PROGRAM
        MOV AH , 0BH
        INT 21 H
        CMP AL , 0DH
        JE AG
FINAL : MOV AH , 4CH
        INT 21 H
END START
```