.model small ;declare model

.data ;declare data model

msg db 'The Time Is:$'

.code ;declare code segement

mov ax,@data ;initialize data segment

mov ds,ax

mov ah,09h ;Display message

lea dx,msg

int 21h

mov ah,2ch ;Read system clock

int 21h

mov al,ch ;Move hours stored in ch to al

add al,00

daa ;Decimal Adjust Al after Addition

call display\_8 ;Call 8 bit display procedure

mov ah,02h ;Display colon

mov dl,':'

int 21h

mov al,cl ;Move minutes stored in cl to al

add al,00

daa ;Decimal Adjust Al after Addition

call display\_8 ;Call 8 bit display procedure

mov ah,02h ;Display colon

mov dl,':'

int 21h

mov al,dh ;Move seconds stored in dh to al

add al,00

daa ;Decimal Adjust Al after Addition

call display\_8 ;Call 8 bit display procedure

jmp exit

proc display\_8 ;Display Procedure

mov ch,02 ;To display 2 digits

mov bl,al ;Move contents of al to bl

again:

rol bl,04 ;Rotate bl left by 4

mov dl,bl ;Move contents of bl to dl

and dl,0fh ;Logical AND Dl with Ofh

cmp dl,09 ;Compare result with 09

jbe x1 ;Jump if below equal to label x1

add dl,07h ;add 7 to dl

x1:add dl,30h ;add 30 to dl

mov ah,02h ;Display single character

int 21h

dec ch ;Decrement ch

jnz again ;Jump to again if not zero

ret

display\_8 endp ;End procedure

exit:

mov ah,4ch ;Call exit function

int 21h

end

