.model tiny

.code

ORG 0100h

start:

jmp trans

intvect dd ?

temp db 00h

hr db ?

min db ?

sec db ?

resi:

push ax

push bx

push cx

push dx

push si

push di

push sp

push bp

push ss

push ds

push es

mov ah,02h

int 1Ah

mov cs:hr,ch

mov cs:min,cl

mov cs:sec,dh

inc cs:temp

mov ax,0B800h

mov es,ax

mov di,0100

mov al,cs:hr

and al,0F0h

mov cl,04h

shr al,cl

add al,30h

mov es:[di],al

inc di

inc di

mov al,cs:hr

and al,0Fh

add al,30h

mov es:[di],al

inc di

inc di

mov al,':'

mov es:[di],al

inc di

inc di

mov al,cs:min

and al,0F0h

mov cl,04h

shr al,cl

add al,30h

mov es:[di],al

inc di

inc di

mov al,cs:min

and al,0Fh

add al,30h

mov es:[di],al

inc di

inc di

mov al,':'

mov es:[di],al

inc di

inc di

mov al,cs:sec

and al,0F0h

mov cl,04h

shr al,cl

add al,30h

mov es:[di],al

inc di

inc di

mov al,cs:sec

and al,0Fh

add al,30h

mov es:[di],al

cmp cs:temp,100

jne nobeep

mov cs:temp,00h

mov al, 182 ; Prepare the speaker for the

out 43h, al ; note.

mov ax, 9121 ; Frequency number (in decimal)

; for C.

out 42h, al ; Output low byte.

mov al, ah ; Output high byte.

out 42h, al

in al, 61h ; Turn on note (get value from

; port 61h).

or al, 00000011b ; Set bits 1 and 0.

out 61h, al ; Send new value.

mov bx, 25 ; Pause for duration of note.

pause1:

mov cx, 65535

pause2:

dec cx

jne pause2

dec bx

jne pause1

in al, 61h ; Turn off note (get value from

; port 61h).

and al, 11111100b ; Reset bits 1 and 0.

out 61h, al

nobeep: pop es

pop ds

pop ss

pop bp

pop sp

pop di

pop si

pop dx

pop cx

pop bx

pop ax

jmp dword ptr cs:intvect

trans:

cli

mov ah,35h

mov al,08h

int 21h

mov word ptr intvect,bx

mov word ptr intvect+2,es

mov ah,25h

mov al,08h

mov dx,offset resi

int 21h

mov ah,31h

mov al,00h

mov dx,offset trans

sti

int 21h

end start

;\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Output\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

;

