

用户园地

字处理软件

WPS CCED WS

WS

增加功能

48-49

为 WPS、CCED、WS 增加定时存盘功能

吉林省松原市

刘文斌

TP317

在国内,〈WPS〉〈CCED〉〈WS〉等字处理软件拥有众多用户,普及面广。用户使用这些字处理软件进行大量的录入、编辑和排版,给工作带来了极大方便。在录入时要求操作人员能够定时存盘,避免因突然出现的掉电或死机造成数据的丢失,但操作人员有时只注意录入而忘记存盘,笔者特写一程序,用于在〈WPS〉〈CCED〉〈WS〉中实现定时自动存盘。

程序修改中断 1CH, 该中断每秒发生 18.2 次, 在 1CH 中断中累计时间。定时时间一到, 即向键盘缓冲区送入控制字符, 达到在编辑软件中定时自动存盘的目的。用户可按需要修改 COUNTS 的计数来控制定时存盘时间, 最长为 30 分钟存盘一次, 建议采用 3-5 分钟定时存盘, 5 分钟的计数值为 $5 \times 60 \times 18.2 = 5460$, 〈CCED〉的用户只需将程序中带“[]”标记的语句去掉, MOV WORD PTR [SI], 1F53H 一句改为 MOV WORD PTR [SI], 3C00H 即可。

程序采用 8086 汇编语言, 并已在多台机器上调试通过。一次运行装入二次运行即退出。

程序清单:

```

; NAME AUTOSAVE.ASM PROGRAM BY LIU WEN BIN
; USING IN <WPS> <CCED> <WS> TIME SAVE
; MASM AUTOSAVE:
; LINK AUTOSAVE:

```

```

MOV AX,4000H
INT 21H
POP BX
MOV AX,3E00H
INT 21H
RET
CODE ENDS
END START

```

(3) 1F3D.TXT 的内容, 即在 KILL.EXE 的 1F3D 处加入的密文形式:

```

E320 6B 65 79 00 00 ;文件名:KEY
E223D
19 F7 F9
E2240
4A 20 5B B2 54 7C CB 09 97 F6 CD 6D 5E 4E 4B D0
E2250
21 23 9D D8 7D 1D AE 52 90 AE 13 C22 52 29 A8 D9
E2260

```

```

; EXE2BIN AUTOSAVE.EXE AUTOSAVE COM

```

```

code segment
assume cs:code,ds:code,es:nothing,ss:nothing
org 100h
start: jmp init
counts dw 464 ; --- TIME SET ---
intlc-old dd 00h
new-intlc proc far
sti
push ds
push ss
push es
push di
push si
push dx
push cx
push bx
push ax

push cs
pop ds
mov ax, word ptr cs:[counts]; -- time counts --
dec ax
cmp ax, 00h
jnz inter_end
mov ax, 40h
mov ds, ax
mov ax, word ptr ds:[1ch] ; clear keyboard buffer
mov word ptr ds:[1sh], ax ;
mov si, word ptr ds:[1sh] ; keyboard buffer headpoint
mov di, word ptr ds:[1ch] ; keyboard buffer tailpoint
1_01: mov word ptr ds:[si], 250bh ; [ ] --- [ ]

```

```

97 A2 4D 86 3E 7D B3 DC 98 33 5F 19 49 CF 2C 51
E2270
50 B9 DC B6 0A 11 C9 3D 54 B8 9C 54 11 72 2C 6B
E2280
BB 27 29 BE FD AA 00 95 1D 3B 3C 0C 54 B4 2E 30
W
Q

```

(4) 与 1F3D.TXT 相对应的明码, 从 KEY 中读取指纹

```

3749:1F3D CD11 INT 11
3749:1F3F D0C0 ROL AL,1
3749:1F41 D0C0 ROL AL,1
3749:1F43 2403 AND AL,03
3749:1F45 FEC0 INC AL
3749:1F47 2E CS:
3749:1F48 A2C71F MOV [1FC7],AL
3749:1F4B 0E PUSH CS
3749:1F4C 07 POP ES
3749:1F4D BA2000 MOV DX,0020

```

```

add si,02h          :[] []
cmp si,3eb          :[] []
jnz l.02            :[] DIRECT WRITE []
mov si,1eh          :[] []
l.02: add di,02h      :[] KEYBOARD BUFFER[]
      cmp di,3eb      :[] []
      jnz l.03        :[] (DELETE) []
      mov di,1eh      :[] ----- []
l.03: mov word ptr ds:[si],1f53h ; <wps>. <ws> use 1f53h
      add di,02h      ; in <cced> use 3c00b
      cmp di,3eb
      jnz l.04
      mov di,1eh
l.04: mov word ptr ds:[1cb],di ; set tail point
      mov ax,464
inter. end: mov word ptr cs:[counts],ax
          pop ax
          pop bx
          pop cx
          pop dx
          pop si
          pop di
          pop es
          pop ss
          pop ds
          jmp cs:intlc. old
new. intlc      endp
;[]-----TSR INSTALL-----[]
init:
      mov ax,351ch
      int 21h
      cmp bx,109h
      js tsr. exit
      mov word ptr es:[intlc. old],bx
      mov word ptr cs:[intlc. old+2],es
      push es
      pop ds
      mov dx,offset new. intlc
      mov ax,251ch
      int 21h
      mov ah,09h

mov dx,offset INCLUDE MEG
int 21h
mov ah,09h
mov dx,offset INSTALL. MEG
int 21h
mov dx,offset init
int 27h
;[]-----EXIT TSR-----[]
tsr. exit:
      push es
      pop ds
      les si,intlc. old
      lds dx,[si]
      mov ax,251ch
      int 21h
      push es
      pop ds
      mov ah,09h
      mov dx,offset EXIT. TSR. MEG
      int 21h
      mov ah,49h
      int 21h
      mov ah,4ch
      int 21h
;[]-----DISPLAY MESENSE-----[]
INCLUDE. MEG DB 0DH,0AH
              DB 'Automation Save File In <WPS> <WS>
              <CCED>'
              DB 'Version 1.00 ' ,0DH,0AH
              DB '(C)Copyright SINOPEC Qiao Guo Refinery '
              DB 'Computing Centre Liu Wen Bin 1995.3',
              0DH,0AH,'$'
INSTALL. MEG DB 0DH,0AH,07,'Program Already Installed. '
              DB 'OK! Time Save Reset Set ',0DH,0AH,'$'
EXIT. TSR. MEG DB 0DH,0AH,07,'Time Automatioo Save Exit '
              DB ', Thank You For Used, Good Bye!',0DH,
              0AH,'$'
;[]-----DISPLAY MESENSE-----[]
code      ends
end start

```

```

3749:1F50 B8003D    MOV    AX,3D00
3749:1F53 CD21      INT     21;打开文件 KEY
3749:1F55 2E        CS:
3749:1F56 8E06252B  MOV    ES,[2B25]
3749:1F5A 89C3      MOV    BX,AX
3749:1F5C B90002    MOV    CX,0200
3749:1F5F BAC81F    MOV    DX,1FC8
3749:1F62 B8003F    MOV    AX,3F00
3749:1F66 50        PUSH   AX
3749:1F66 53        PUSH   BX
3749:1F67 51        PUSH   CX
3749:1F68 CD21      INT     21;读 512 字节到 1FC8
3749:1F6A 2E        CS:
3749:1F6B 8B161F2B  MOV    DX,[2B1F]
3749:1F6F 59        POP     CX
3749:1F70 5B        POP     BX
3749:1F71 58        POP     AX

```

```

3749:1F72 53        PUSH   BX
3749:1F73 CD21      INT     21;读 512 字节到[2B1F]
3749:1F75 5B        POP     BX
3749:1F76 B8003E    MOV    AX,3E00
3749:1F79 CD21      INT     21;关闭文件
3749:1F7B B80004    MOV    AX,0400
3749:1F7E 2E        CS:
3749:1F7F A31D2B    MOV    [2B1D],AX
3749:1F82 BA0001    MOV    DX,0100
3749:1F85 31C0      XOR     AX,AX
3749:1F87 2E        CS:
3749:1F88 8B0E212B  MOV    CX,[2B21];设置返回参数
3749:1F8C C3        RET

```

以上程序,由 MS 宏汇编编制,均在 Compaq/38620e 和 Compaq/486PROSIGNIA VS 上调试通过,且运行完全正确。