

# 第五章 程式的組譯連結和執行

MASM  
LINK  
執行  
寫.com程式

## 組合語言程式製作過程

以文件編輯程式編寫程式, 存放在.asm檔  
以MASM組譯, 產生.obj檔  
以LINK連結, 產生.exe檔  
執行程式

# 組譯程式

Two pass: 讀source檔兩次

pass 1: 建立符號表(Symbol table)

pass 2: 產生code

# .com檔程式

```
                page 60,80
title           a05com1 COM program to move and add
codesg         segment para 'Code'
                assume cs:codesg,ds:codesg,ss:codesg,es:codesg
                org     100h      ;start at end of PSP
begin:         jmp     main      ;jump past data
;-----
fldd          dw     215
flde          dw     125
fldf          dw     ?
;-----
main          proc   far
              mov    ax,fldd    ;move 215 to ax
              add    ax,flde    ;add 125 to ax
              mov    fldf,ax    ;store sum in fldf
              mov    ax,4c00h   ;end processing
              int    21h
main          endp                   ;end of a procedure
codesg       ends
end          begin                    ;end of program
```

```

page 60,80
title a05com2 COM program to move and add data
.model tiny
.code
org 100h ;start at end of PSP
begin: jmp main ;jump past data
;-----
fldd dw 215 ;data definition
flde dw 125
fldf dw ?
;-----
main proc near
mov ax,fldd ;move 215 to ax
add ax,fde ;add 125 to ax
mov fldf,ax ;store sum in fldf
mov ax,4c00h ;end processing
int 21h
main endp ;end of a procedure
end begin ;end of program

```