

To compute ncr using recursive function.

- model small

- data

n dw 4

r dw 2

ncr dw 0

- code

mov ax, @data

mov ds, ax

mov ax, n

mov bx, r

```
call ncrpew
call disp
jmp final
```

```
ncrpew proc near
    cmp ax, bx
    je res1
    cmp bx, 0
    je res1
    cmp bx, 1
    je resm
    dec ax
    cmp bx, ax
    je incu
    push ax
    push bx
    ret
```

res1: inc ncr

ret

incu: inc ncr

resm: add ncr, ax ; 1+2 3+3 = 6

ret

ncrpew endp

disp proc near

mov bx, ncr

add bx, 3030H

mov .dl, bh

mov ah, 02H

int 21H

mov dl, bl

mov ah, 02H



```
int 21H  
out  
disp endp  
final: mov ah, 4ch  
        int 21H  
        end
```

DOSBox Status Window

DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Program: DOSBOX

C:\>cd masm

C:\MASM>edit ncr.asm

C:\MASM>masm ncr;;

Microsoft (R) Macro Assembler Version 5.00

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51758 + 464786 Bytes symbol space free

0 Warning Errors

0 Severe Errors

C:\MASM>link ncr;;

Microsoft (R) Overlay Linker Version 3.60

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LINK : warning L4021: no stack segment

C:\MASM>ncr

06

C:\MASM>