

S.R. POOTHA
IBM19CS135

.model small
.data

n dw 4

r dw 2

nce dw 0

.code

mov ax, @data

mov ds, ax

mov ax, n

mov bx, r

call ncepro

call disp

jmp final

ncepro proc near

cmp ax, bx ; r = n

je res1

cmp bx, 0 ; r = 0

je res1

cmp bx, 1 ; r = 1

~~cmp~~ je resn

dec ax ; r = n - 1

cmp bx, ax

je inc1

push ax

push bx

call ncepro

pop bx

pop ax

dec bx

push ax

push bx

call ncepro

pop bx

pop ax

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set

inc : inc nrc

seg : add nrc, ax

set

nrcpro endp

disp proc near

mov bx, nrc

add bx, 3030h

mov dl, bh

mov ah, 02h

int 21h

mov dl, bl

mov ah, 02h

int 21h

set

disp endp

final: mov ah, 4ch

int 21h

end

File Edit Search View Options Help

C:\MASM\NCR.ASM

.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 ncrpro

call disp

jmp final

ncrpro proc near

cmp ax,bx ;r=n

je res1

cmp bx,0 ;r=0

je res1

cmp bx,1 ;r=1

F1=Help

Line:1

Col:1

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C:\MASM\NCR.ASM

```
    cmp bx,1    ;r=1
    je resn
    dec ax      ;r=n-1
    cmp bx,ax
    je incr
    push ax
    push bx
    call ncrpro

pop bx
pop ax
dec bx
push ax
push bx
call ncrpro
pop bx
pop ax
ret

res1:inc ncr
ret

incr:inc ncr
```

F1=Help

Line:43 Col:1

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C:\MASM\NCR.ASM

```
incr:inc ncr
resn:add ncr,ax
ret
ncrpro 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
    ret
disp endp

final: mov ah,4ch
       int 21h
       end
```

F1=Help

Line:63 Col:1

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>