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nC_r USING RECURSIVE PROCEDURE

. MODEL SMALL
. DATA

```
.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 res 1 res1
cmp bx, 0    ;  r = 0
je    res1              ;    3C2 + 3C1
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
rsn :  add   ncr, ax        ;  1+2    3+3= 6
                            ;  <1+2+3 = 6
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
```