

SHIVANI GAHLOT

IBM19CS150.

BATCH-2

ncx USING RECURSIVE PROCEDURE

.model small

.data

n dw 4

x dw 2

ncx dw 0

.code

mov ax, @data

mov ds, ax

mov ax, n

mov bx, x

call ncxpro

call disp

jmp final

ncxpro proc near

cmp ax, bx ; x=n

je res1

cmp bx, 0 ; x=0

je res1

cmp bx, 1 ; x=1

je resn

dec ax ; x=n-1

cmp bx, ax

je, incx

push ax

push bx

call ncxpro

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

res1: inc ncr
ret

incr: inc ncr

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

ncrpro endp

disp proc near

mov bx, ncr

add bx, 3030h

mov dl, bh

mov ah, 02h

mov int21h

mov dl, bl

mov ah, 02h

int 21h

ret

disp endp

final: mov ah, 4ch

int 21h

end