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Assembly Based

IBM19C5794

Apl

~~LAB 10~~: LAB<sup>10</sup>: Develop an ALP, to compute  $nCr$ ,  
using recursive procedure.

• MODEL SMALL

• DATA

N DB 05H

R DB 02H

NCRVAL DW 01H DUP (?)

• CODE

START: MOV AX, @DATA  
MOV DS, AX

MOV CL, R

MOV CH, N

XOR AX, AX

CALL NCR

MOV [NCRVAL], AX

MOV AH, 4CH

INT 21H

NCR PROC NEAR

CMP CH, CL

JE EQUAL

JC FINISH

CMP CL, 01H

JE NEXT

CMP CL, 00H

JE EQUAL

DEC CH

PUSH CX

CALL NCR

POP CX

DEC CL

CALL NCR

RET

NEXT:

XOR BX, BX

MOV BL, CH

ADD AX, BX

RET

EQUAL: ADD AX, 01H

FINISH: RET

NCR ENDP