

Compute NCR using recursive procedure

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SPLASH

MODEL SMALL

VINEETH R-RAO

DATA

IBM19CS183

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, 00H
        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

END START