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Program to compute nCr using Recursive procedure.

```
.MODEL SMALL
.DATA
N DB 05H
R DB 00H
NCRVAL  DW  01 DUP (?)

.CODE
START : MOV AX, @ DATA
        MOV DS, AX
        MOV CL, R ;  CL = 02H → Value of R
        MOV CH, N ;  CH = 05H → Value of N
        XOR AX, AX
        CALL NCR
        MOV [NCRVAL], AX
        MOV AH, 4CH
        INT 21H


NCR  PROC  NEAR
        CMP CH, CL
        JE EQUA2 ; BN == R? set 1
        JC FINISH ; N<R ? set 0
        CMP CL, 01H ; R==1? SET N
        JE NEXT
        CMP CL, 00H
        JE EQUAL
        DEC CH ;    CH = 04 = N-1
        PUSH CX ;   CH = 04  CL = 02
        CALL NCR
        POP CX
        DEC CL
        CALL NCR
```

```
NEXT :    XOR   BX, BX
          MOV BL, CH    ;  BL = 05 → value of N
          ADD AX, BX    ;  00 + 05 = 05 stores as
                           result which is the value
                           of N

          RET
EQUAL:  ADD AX, 01H   ;   AX = 01H
FINISH :  RET
NCR   ENDP
END    START
```