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13M19CS202  
3-D

h1  
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## Lab test 6 program (NCR)

• NCR on non-negative integer  
• 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 ; if B. SET=1

JC FINISH ; if C. SET=0

CMP CL, 01H ; if B=1? SETX

JE NEXT ; if B=1? SETX

DEC CH

PUSH CX ; Push value on stack

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 ENP

END START