24. SORT N BYTES

DATA SEGMENT

N DB 08H

A1 DB 08,07,06,05,04,03,02,01,00

DATA ENDS

CODE SEGMENT

ASSUME CS: CODE, DS:DATA

START: MOV AX,DATA

MOV DS,AX

MOV DH,N

DEC DH

AG2: MOV CL,N

DEC CL

MOV CH,00

LEA SI,A1

MOV DI,SI

INC DI

AG1: MOV AL,[SI]

MOV AH,[DI]

CMP AL,AH

JC NEXT

MOV [DI],AL

MOV [SI],AH

NEXT: INC SI

INC DI

LOOP AG1

DEC DH

JNZ AG2

INT 3

CODE ENDS

END START

25. SQUARE OF A NUMBER

DATA SEGMENT

N DB 08H

A1 DW 0000H

DATA ENDS

CODE SEGMENT

ASSUME CS: CODE, DS:DATA

START: MOV AX,DATA

MOV DS,AX

MOV AL,N

MOV BL,N

MUL BL

MOV A1,AX

INT 3

CODE ENDS

END START

26. SEPARATE POSITIVE AND NEGATIVE NUMBERS

DATA SEGMENT

N DB 0AH

L1 DB 98H,45H,87H,23H,96H,23H,56H,45H,80H,87H

L2 DB 09 DUP(00H)

L3 DB 09 DUP(00H)

DATA ENDS

CODE SEGMENT

ASSUME CS: CODE, DS:DATA

START: MOV AX,DATA

MOV DS,AX

MOV CL,N

MOV CH,00H

LEA BX,L1

LEA SI,L2

LEA DI,L3

AGAIN:MOV AL,[BX]

ROL AL,01H

JNC NEXT

ROR AL,01H

MOV [SI],AL

INC SI

JMP N2

NEXT: ROR AL,01H

MOV [DI],AL

INC DI

N2: INC BX

LOOP AGAIN

INT 3

CODE ENDS

END START