20. Transfer block of n numbers

DATA SEGMENT

A1 DB 0AH

A2 DB 74H,23H,56H,32H,78H,45H,23H,89H,55H,25H

A3 DB ?

DATA ENDS

CODE SEGMENT

ASSUME CS:CODE,DS:DATA

START: MOV AX,DATA

 MOV DS,AX

 MOV CX,000AH

 MOV AL,0FFH

 LEA SI,A2

 LEA DI,A3

 AGAIN: MOV AL,[SI]

 MOV [DI],AL

 INC SI

 INC DI

 LOOP AGAIN

 INT 3

CODE ENDS

 END START

21. Fibonocci series

DATA SEGMENT

A1 DB 0AH

A2 DB ?

DATA ENDS

CODE SEGMENT

ASSUME CS:CODE,DS:DATA

START: MOV AX,DATA

 MOV DS,AX

 MOV CL,A1

 MOV CX,00H

 DEC CX

 MOV AL,00H

 MOV BL,01H

 LEA SI,A2

 MOV [SI],AL

 INC SI

 MOV [SI],BL

AGAIN: ADD AL,BL

 MOV DL,AL

 MOV [SI],DL

 MOV AL,BL

 MOV BL,DL

 INC SI

 LOOP AGAIN

 INT 3

CODE ENDS

 END START

22. Square root of a number ( gives root and if no root gives 00)

DATA SEGMENT

A1 DW 0024H

A2 DB 00H

DATA ENDS

CODE SEGMENT

ASSUME CS:CODE,DS:DATA

START: MOV AX,DATA

 MOV DS,AX

 MOV CL ,00H

 MOV AX,0000H

 MOV DX,0001H

ADDAGAIN: ADD AX,DX

 INC CL

 CMP AX,A1

 JZ N1

 JNC N2

 ADD DX,02H

 JMP ADDAGAIN

 N1: MOV A2,CL

 JMP N3

 N2: MOV A2,00H

 N3: INT 3

CODE ENDS

 END START

23. Reverse of an array

DATA SEGMENT

A1 DB 0AH

A2 DB 12H,13H,14H,15H,16H,17H,18H,19H,20H,21H

DATA ENDS

CODE SEGMENT

ASSUME CS:CODE,DS:DATA

START: MOV AX,DATA

 MOV DS,AX

 LEA SI,A2

 LEA DI,A2

 MOV CL,A1

 MOV CH,00H

 ADD DI,CX

 DEC DI

 SHR CX,01H

 AGAIN:MOV AL,[SI]

 MOV AH,[DI]

 MOV [DI],AL

 MOV [SI],AH

 INC SI

 DEC DI

 LOOP AGAIN

 INT 3

CODE ENDS

 END START