Experiment 6 [2]

Separate the positive and negative numbers, copy them to the PDATA array, put the positive numbers in front and the negative numbers in the back , and count the positive and negative numbers separately .

This question takes ARRAY: 1,2,3,4,5,7, - 8 ,-9 as an example

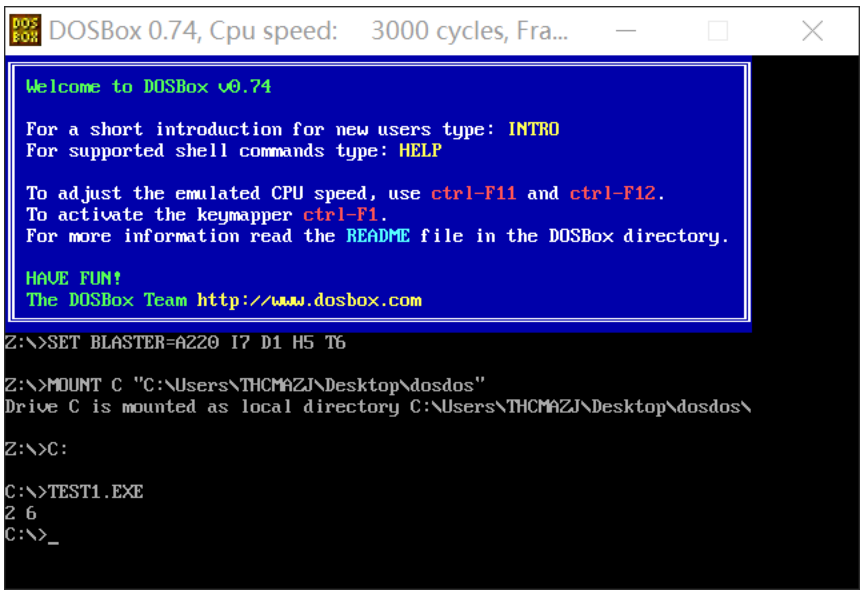
code:

```
DATA SEGMENT
PTABLE DW 1,2,3,4,5, 7 , -8 , -9
DATAS ENDS

EXTRAS SEGMENT
    PDATA DW 16 DUP(?)
    A DB 30H
    B DB 30H
EXTRAS ENDS

CODES SEGMENT
    ASSUME CS:CODES,DS:DATAS,ES:EXTRAS
START:
    MOV AX,DATAS
    MOV DS,AX
    MOV AX,EXTRAS
    MOV ES,AX
    LEA BX,PTABLE
    LEA SI,PDATA
    MOV CX,8
    MOV DX,0
    T:
    MOV AX,[BX]
    TEST AX,8000H
    JZ P
    POP AX
    ADD A,1
    ADD DX,1
    JMP L
    P:
    MOV ES:[SI],AX
    ADD B,1
    ADD SI,2
    L:
    ADD BX,2
    LOOP T
```

```
    MOV CX,DX
    M:
    PUSH AX
    MOV ES:[SI],AX
    ADD SI,2
    LOOP M
    MOV DL,A
    MOV AH,2
    INT 21H
    MOV DL,20H
    MOV AH,2
    INT 21H
    MOV DL,B
    MOV AH,2
    INT 21H
    MOV AH,4CH
    INT 21H
CODES ENDS
    END START
```



实验 7 [3]

Input a two-digit hexadecimal number from the keyboard, convert it to a binary number and display the output.

code:

```
DATA SEGMENT
STR1 DB 'Input A Hexadecimal Num: $'
DATAS ENDS
```

```
STACKS SEGMENT
;
STACKS ENDS

CODES SEGMENT
ASSUME CS:CODES,DS:DATAS,SS:STACKS
START:
MOV AX,DATAS
MOV DS,AX
LEA DX, STR1 ;'INPUT'
MOV AH, 9 ; display string
INT 21H

MOV CH,02H
MOV CL,04H
MOV BX,0
L1:
MOV AH,01H
    INT 21H
    SUB AL,30H
    CMP AL,0AH
    JL L2
    SUB AL,07H
    L2:
    SHL BX,CL
    OR BL,AL
    DEC CH
    JNZ L1
    SHL BX,CL
    SHL BX,CL
    MOV DL,0DH
    INT 21H
    MOV DL,0AH
    MOV AH,2
    INT 21H
    MOV CX,0008H
    R:
    SHL BX,1
    JB PRINT1
    JNB PRINT0
    PRINT1:
    MOV DL,31H
    MOV AH,2
```

```
    INT 21H
JMP L
PRINT0:
MOV DL,30H
MOV AH,2
INT 21H
L:
LOOP R
MOV AH,4CH
INT 21H
CODES ENDS
END START
```

Screenshot of the experiment: