

MICROPROCESSOR LAB

EXPERIMENT 3

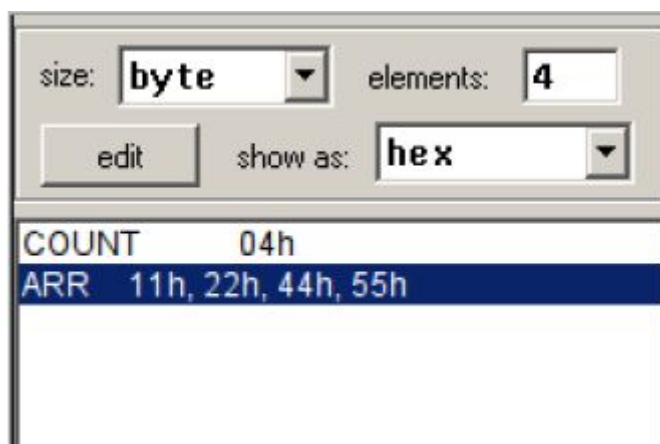
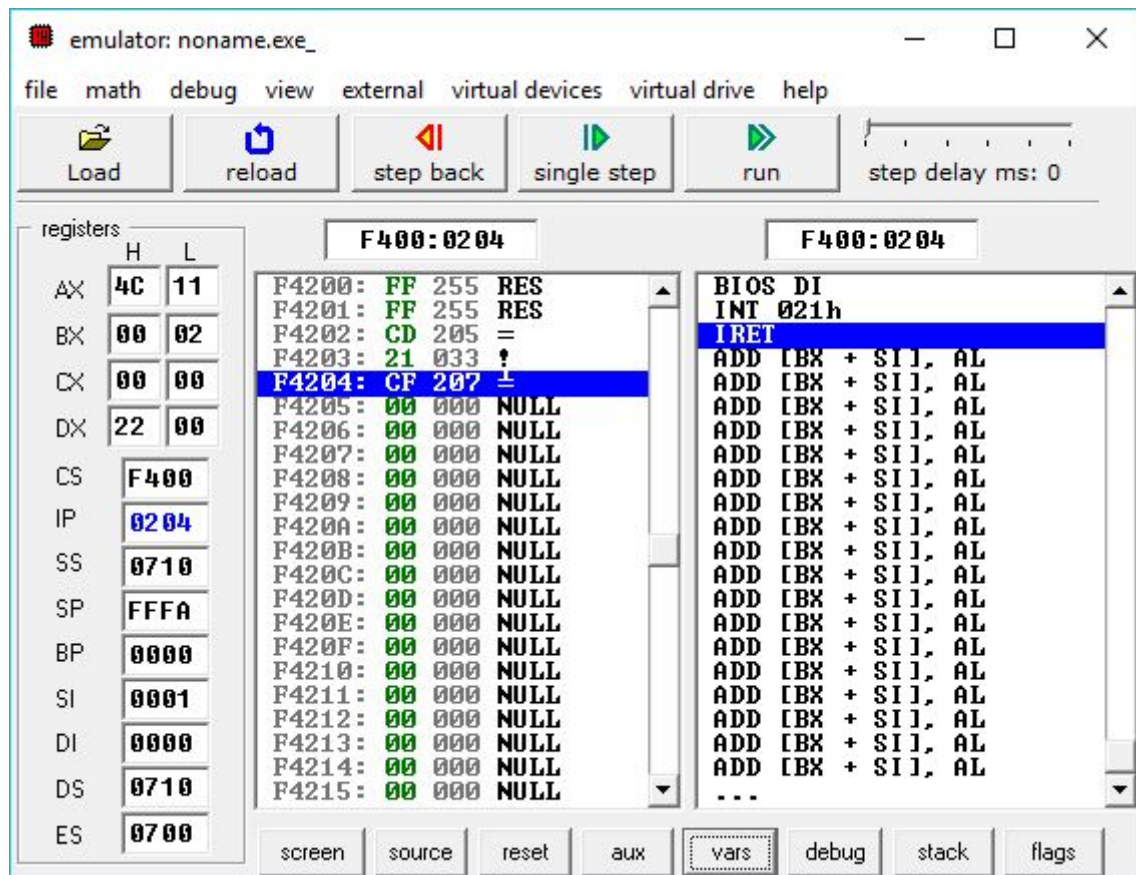
GAIS AMEER
S6 CSE
ROLL 33

3. Perform bubble sort on a list of numbers

Program

```
DATA SEGMENT
    COUNT DB 04H
    ARR DB 55H,44H,11H,22H
DATA ENDS
CODE SEGMENT
ASSUME CS:CODE,DS:DATA
START:
    MOV AX,DATA
    MOV DS,AX
    MOV CL,COUNT
    LOOP1:
        LEA SI,ARR
        MOV CH,CL
        DEC CH
        JZ HELLO
    LOOP2:
        MOV BX,SI
        INC BX
        MOV AL,[SI]
        CMP AL,[BX]
        JLE SKIP
        MOV DH,[BX]
        MOV [SI],DH
        MOV [BX],AL
    SKIP:
        INC SI
        DEC CH
        JNZ LOOP2
    HELLO:
        DEC CL
        JNZ LOOP1
        MOV AH,4CH
        INT 21H
    CODE ENDS
    END START
```

Output



Result

Executed program for Bubble sort in emu8086 and obtained the output.