

Experiment No. 3

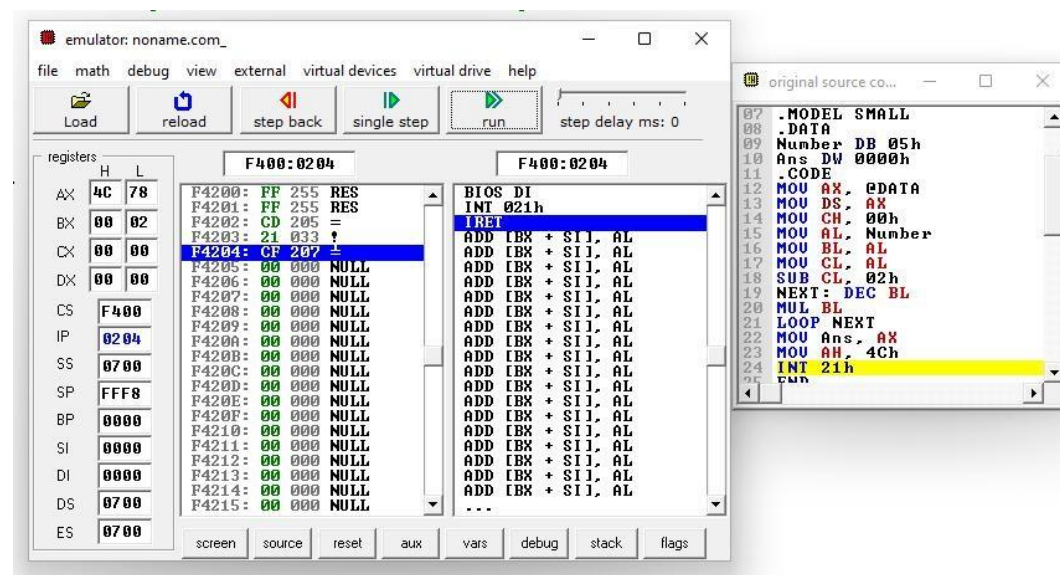
Aim: Write an ALP for 8086 to find the factorial of a number.

Software: 8086 Emulator

Program:

```
05 org 100h
06
07 .MODEL SMALL
08 .DATA
09 Number DB 05h
10 Ans DW 0000h
11 .CODE
12 MOV AX, @DATA
13 MOV DS, AX
14 MOV CH, 00h
15 MOV AL, Number
16 MOV BL, AL
17 MOV CL, AL
18 SUB CL, 02h
19 NEXT: DEC BL
20 MUL BL
21 LOOP NEXT
22 MOV Ans, AX
23 MOV AH, 4Ch
24 INT 21h
25 END
26
27 ret
28
29
30
```

Output:



Conclusion: Thus, we have successfully implemented an ALP for 8086 to find the factorial of a number.