

NAME: GINI CHACKO

SEMESTER: IV

CLASS: SE COMPS B

BATCH: B

ROLL: 8942

TOPIC: MP EXPERIMENT 9:

To Calculate

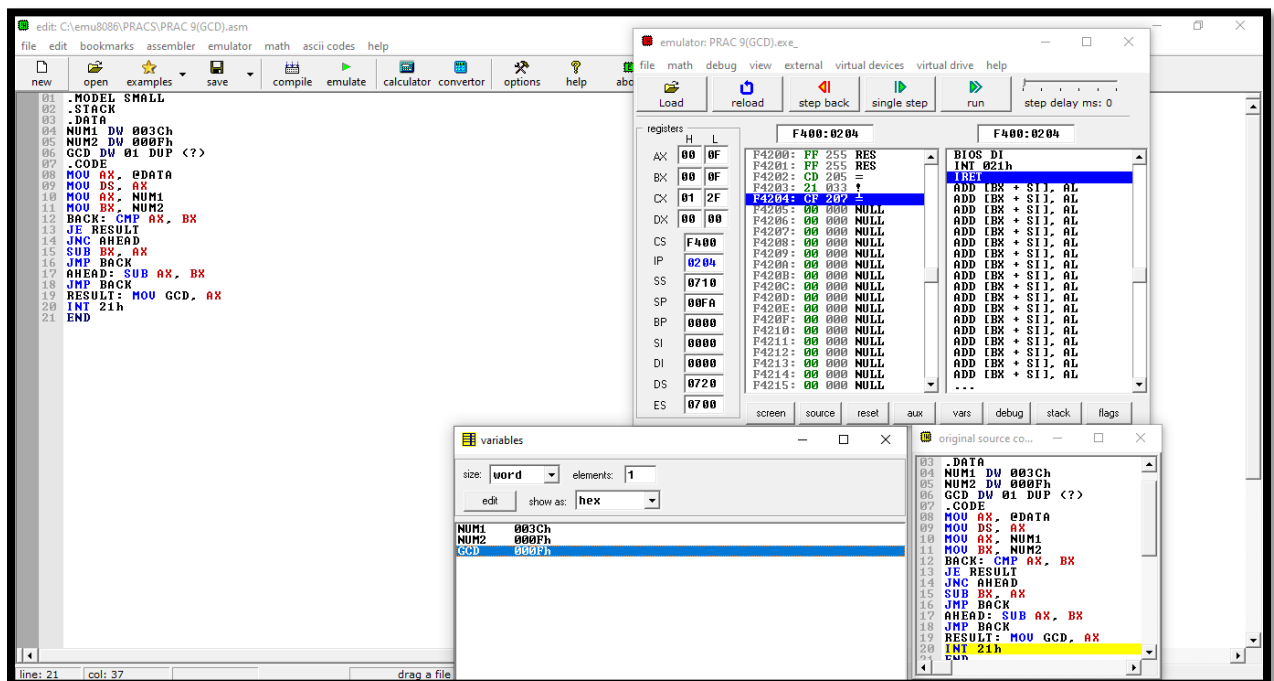
- **GCD**
- **LCM**

A.] TO CALCULATE GCD

CODE:

```
.MODEL SMALL
.STACK
.DATA
NUM1 DW 003Ch
NUM2 DW 000Fh
GCD DW 01 DUP (?)
.CODE
MOV AX, @DATA
MOV DS, AX
MOV AX, NUM1
MOV BX, NUM2
BACK: CMP AX, BX
JE RESULT
JNC AHEAD
SUB BX, AX
JMP BACK
AHEAD: SUB AX, BX
JMP BACK
RESULT: MOV GCD, AX
INT 21h
END
```

OUTPUT:



B.] TO CALCULATE LCM

CODE:

```
.MODEL SMALL
.STACK
.DATA
NUM1 DW 003Ch
NUM2 DW 000Fh
LCM DW 01 DUP (?)
.CODE
MOV AX, @DATA
MOV DS, AX
MOV AX, NUM1
MOV BX, NUM2
MOV CX, AX
MOV DX, BX
BACK: CMP AX, BX
JE RESULT
JNC AHEAD
ADD AX, CX
JMP BACK
AHEAD: ADD BX, DX
JMP BACK
RESULT: MOV LCM, AX
INT 21h
END
```

OUTPUT:

