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CSE

Lab Assignment 9

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Task: Write a program to find LCM of two numbers using 8085 & verify.

Code:

```
;<Program title>
jmp start
;data
;code
start: nop
LXI H,000AH
MOV C,M
MVI B,00H
INX H
MOV A,M
CMA
MOV E,A
MVI D,0FFH
INX D
LXI H,00H
NEXT: DAD B
SHLD 000CH
LOOP: DAD D
JNC SKIP
MOV A,H
ORA L
JZ EXIT
```

JMP LOOP
SKIP: LHLD 000CH
JMP NEXT
EXIT: LHLD 000CH
HLT

Input:
000AH->3
000BH->4

Output:
000CH->12

Screenshot:

Address (Hex)	Address	Data
0000	0	0
0001	1	0
0002	2	0
0003	3	0
0004	4	0
0005	5	0
0006	6	0
0007	7	0
0008	8	0
0009	9	0
000A	10	3
000B	11	4
000C	12	12
000D	13	0
000E	14	0

Start

Registers			Flag	
A		00	S	0
BC	00	03		
DE	FF	FC	Z	1
HL	00	0C		
PSW	00	00	AC	0
PC	42	2E	P	1
SP	FF	FF		
Int-Reg		00	C	0

****

Input:
000AH->16
000BH->4

Output:
000CH->16

Address (Hex)	Address	Data
0000	0	0
0001	1	0
0002	2	0
0003	3	0
0004	4	0
0005	5	0
0006	6	0
0007	7	0
0008	8	0
0009	9	0
000A	10	16
000B	11	4
000C	12	16
000D	13	0
000E	14	0

Registers

A		00
BC	00	10
DE	FF	FC
HL	00	10
PSW	00	00
PC	42	2E
SP	FF	FF
Int-Reg		00

Flag

S	0
Z	1
AC	0
P	1
C	0