EXPERIMENT 1.5

Multiplication of two eight-bit hexadecimal numbers using MUL command and division of two eight-bit hexadecimal numbers

Code:

```
1         ORG 00H
2         MOV 40H, #32H
3         MOV 41H, #42H
4         MOV 60H, #0A0H
5         MOV 61H, #0FH
6         MOV R0, #40H ; pointer for inputs
7         MOV R1, #44H ; pointer for outputs
8         MOV A ,@R0   ; move 1st value to A
9         INC R0       ; inc R0
10        MOV B  ,@R0  ; mov 2nd value to b
11        MUL AB       ; MULTIPLY
12        MOV @R1,A    ; store result
13        DEC R1       ; dec R1
14        MOV @R1,B    ; store result
15        MOV R0,#60H
16        MOV R1,#64H
17        MOV A ,@R0   ; move 3rd value to A
18        INC R0       ; inc R0
19        MOV B,@R0    ; move 4th value to B
20        DIV AB       ; DIVIDE
21        MOV @R1,A    ; store reminder
22        DEC R1       ; dec R1
23        MOV @R1,B    ; store quotient
24        END
```

MULTIPLICATION:

inputs: 40H , 41H
outputs: 43H , 44H

DIVISION:

inputs: 40H , 41H
outputs: 43H , 44H

Output: