

EXPERIMENT NO: 2**AIM:**

PART A: WRITE AN 8085 ASSEMBLY LANGUAGE TO PERFORM MULTIPLICATION OF TWO 8 BIT NOS.

PROGRAM:

```
                MVI D,00H
                MVI A,00H
                LXI H,4150H
                MOV B,M
                INX H
                MOV C,M
LOOP:           ADD B
                JNC NEXT
                INR D
NEXT:           DCR C
                JNZ LOOP
                STA 4152H
                MOV A,D
                STA 4153H
                HLT
```

OBSERVATION:

INPUT:	FF	(4150)
	FF	(4151)
OUTPUT:	01	(4152)
	FE	(4153)

PART B: WRITE AN 8085 ASSEMBLY LANGUAGE TO PERFORM DIVISION OF TWO 8 BIT NOS.**PROGRAM:**

```
                LXI H,4150H
                MOV B,M
                MVI C,00H
                INX H
                MOV A,M
LOOP:           CMP B
                JC LOOP
                SUB B
                INR C
                JMP NEXT
NEXT:           STA 4152H
                MOV A,C
                STA 4153H
                HLT
```

OBSERVATION:

INPUT: 4150H-FF
 4151H-FF

OUTPUT: 4152H-01 ----- REMAINDER
 4153H-FE ----- QUOTIENT

CONCLUSION: