



## **PARTC: 8 BIT SUBTRACTION**

### **PROGRAM:**

```
MVI C,00H
LXI H,0042H
MOV A,M
INX H
MOV B,M
SUB B
JNC LOOP
INR C
CMA
INRA
```

```
LOOP: STA 0047H
MOV A,C
STA 0048H
```

0x0042	05		1	MVI C,00H
0x0043	0E		2	LXI H,0042H
0x0044	00		3	MOV A,M
0x0045	00		4	INX H
0x0046	00		5	MOV B,M
0x0047	09		6	SUB B
0x0048	01		7	JNC LOOP
0x0049	00		8	INR C
0x004A	00		9	CMA
0x004B	00		10	INR A
0x004C	00		11	LOOP:
			12	STA 0047H
			13	MOV A,C
			14	STA 0048H
			15	HLT
			16	



**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
```

0x003E	00	1	MVI D, 00H
0x003F	00	2	MVI A, 00H
0x0040	00	3	LXI H, 0042H
0x0041	00	4	MOV B, M
0x0042	05	5	INX H
0x0043	03	6	MOV C, M
0x0044	00	7	LOOP:
0x0045	0F	8	ADD B
0x0046	00	9	JNC NEXT
0x0047	00	10	INR D
0x0048	00	11	NEXT:
		12	DCR C
		13	JNZ LOOP
		14	STA 0045H
		15	MOV A, D
		16	STA 0046H
		17	HLT
		18	

**OBSERVATION:**

INPUT: 05(0042)

03(0043)

OUTPUT: 0F(0045)

