

## **8-BIT SUBTRACTION**

**EXP NO: 2**

**AIM:** To write an assembly language program to implement 8-bit subtraction using 8085 processor.

### **ALGORITHM:**

- 1) Start  
the program by loading the first data into the accumulator.
- 2) Move  
the data to a register.
- 3) Get  
the second data and load it into the accumulator.
- 4) Subtract  
the two register contents.
- 5) Check  
for borrow.
- 6) Store  
the difference and borrow in the memory location.
- 7) Halt.

### PROGRAM:

LDA 8000

MOV B, A

LDA 8001

SUB B

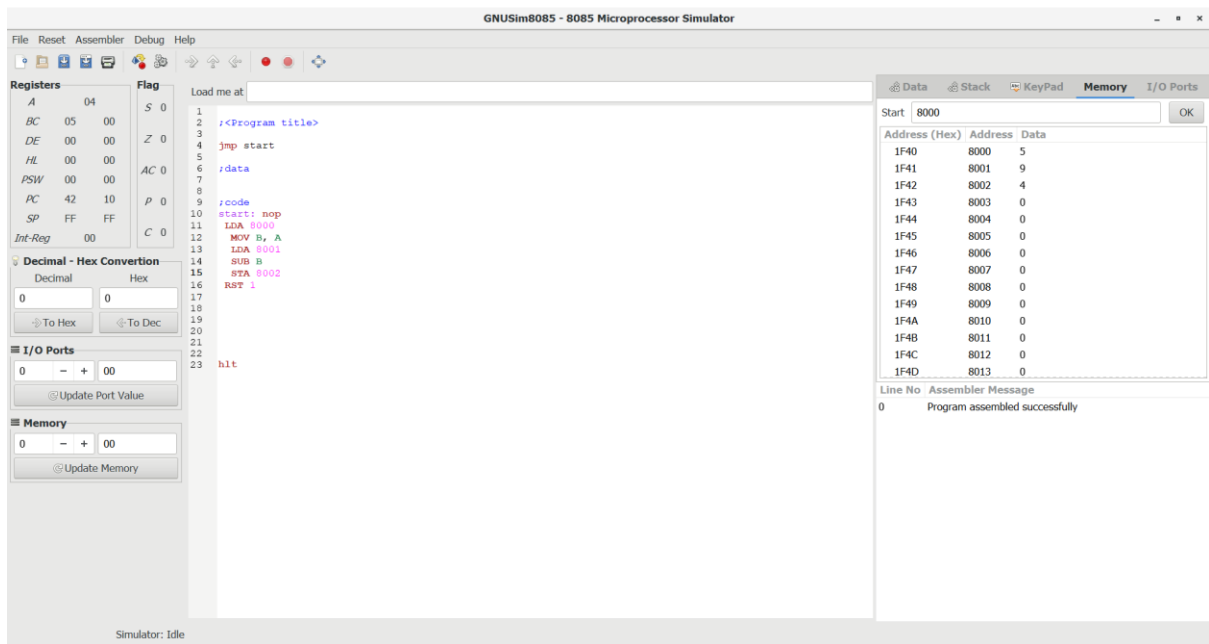
STA 8002

RST 1

### INPUT:

Data Stack Keypad Memory I/O Port			
Start	<input type="text" value="8000"/>		<input type="button" value="OK"/>
Address (Hex)	Address	Data	
1F40	8000	5	
1F41	8001	9	
1F42	8002	4	
1F43	8003	0	
1F44	8004	0	
1F45	8005	0	
1F46	8006	0	
1F47	8007	0	
1F48	8008	0	
1F49	8009	0	
1F4A	8010	0	
1F4B	8011	0	
1F4C	8012	0	
1F4D	8013	0	

### OUTPUT:



**RESULT:** Thus the program was executed successfully using 8085 processor simulator.