

8-BIT SUBTRACTION

EXP NO: 2

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

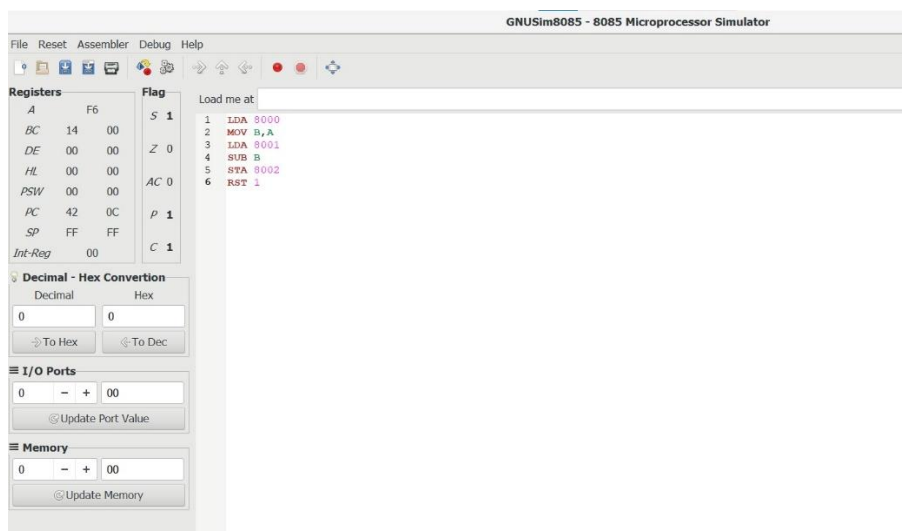
ALGORITHM:

- 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:



OUTPUT:

Data	Stack	Keypad	Memory	I/O Ports
Start	8000		OK	
Address (Hex)	Address	Data		
8000	32768	20		
8001	32769	10		
8002	32770	10		
8003	32771	0		
8004	32772	0		
8005	32773	0		
8006	32774	0		
8007	32775	0		
8008	32776	0		
8009	32777	0		
Line No	Assembler Message			
1	Program assembled successfully			

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