### **8-BIT ADDITION**

# **EXP NO: 1**

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

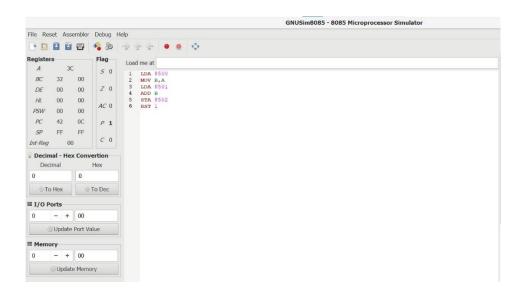
## **ALGORITHM:**

- 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) Add the two register contents.
- 5) Check for carry.
- 6) Store the value of sum and carry in the memory location.
- 7) Halt.

#### PROGRAM:

LDA 8500 MOV B, A LDA 8501 ADD B STA 8502 RST 1

### **INPUT:**



# OUTPUT:

Start 8	500			OK
Addres	s (Hex)	Address	Data	
2134		8500	50	
2135		8501	10	
2136		8502	60	
2137		8503	0	
2138		8504	0	
2139		8505	0	
213A		8506	0	
213B		8507	0	
213C		8508	0	
213D		8509	0	
213E		8510	0	
213F		8511	0	
2140		8512	0	
2141		8513	0	
Line No	Assem	bler Mess	age	

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