8-BIT DIVISION

EXP NO: 4

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

ALGORITHM:

- 1) Start the program by loading a register pair with the address of memory location.
- 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) Increment the value of the carry.
- 6) Check whether the repeated subtraction is over.
- 7) Store the value of quotient and the reminder in the memory location.
- 8) Halt.

PROGRAM:

LDA 8501				1
MOV B,				1
LDA 8500	MVI C,00	LOOP:CN	ΜР	12
JC LOOP1	SUB			12
INR C	JMP LOOP	STA 8503	DCR	12
MOV A,				12

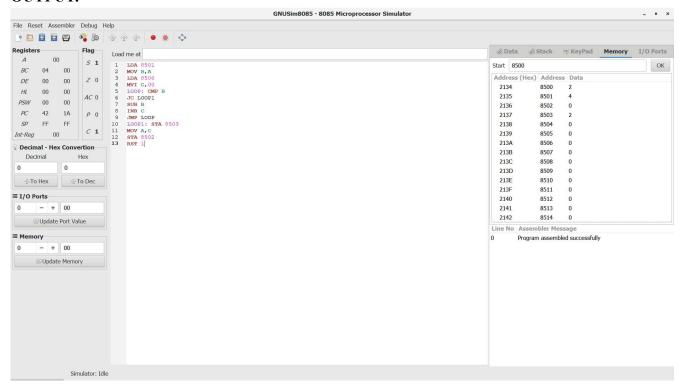
LOOP1: STA 8502

RST 1

INPUT:

Start	8500				ОК	
	201911000	1 22			OK	
Address (Hex)			Data			
213	4	8500	2			
213	5	8501	4			
213	6	8502	0			
2137		8503	2			
213	8	8504	0			
213	9	8505	0			
213	A	8506	0			
213	В	8507	0			
213	C	8508	0			
213	D	8509	0			
213	E	8510	0			
213	F	8511	0			
214	10	8512	0			
214	1	8513	0			
214	2	8514	0			
Line N	lo Assem	Assembler Message				

OUTPUT:



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