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

MOV B, A

LDA 8500

MVI C,00

LOOP: CMP B

JC LOOP1

SUB B

INR C

JMP LOOP

LOOP1: STA 8502

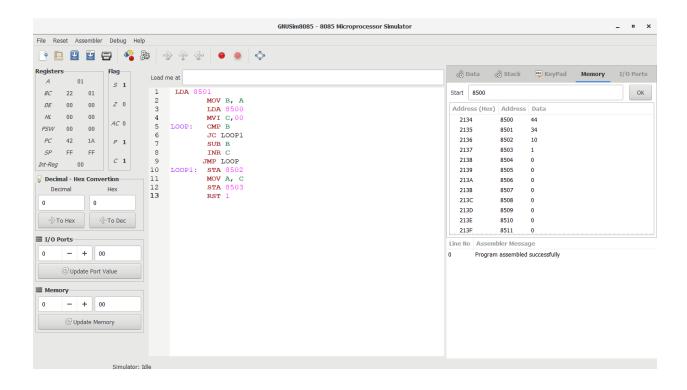
MOV A, C

STA 8503

RST 1

INPUT & OUTPUT:

Start	8500		ОК
Address (Hex)		Address	Data
2134		8500	44
2135		8501	34
2136		8502	10
2137		8503	1
2138		8504	0
2139		8505	0
213A		8506	0
213B		8507	0
213C		8508	0
213D		8509	0
213E		8510	0
213F		8511	0



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