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

STA 8503

DCR C

MOV A, C

LOOP1: STA 8502

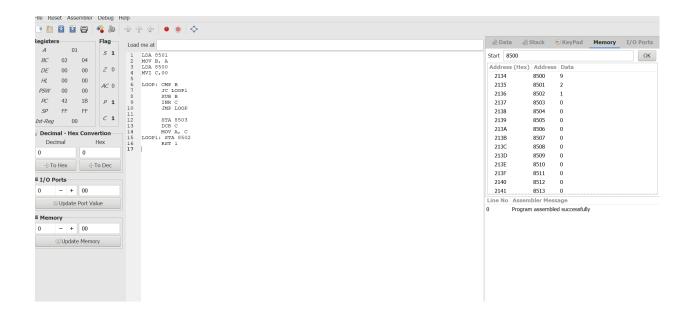
RST 1

INPUT:

8500-9

8501-2

OUTPUT:



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