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.

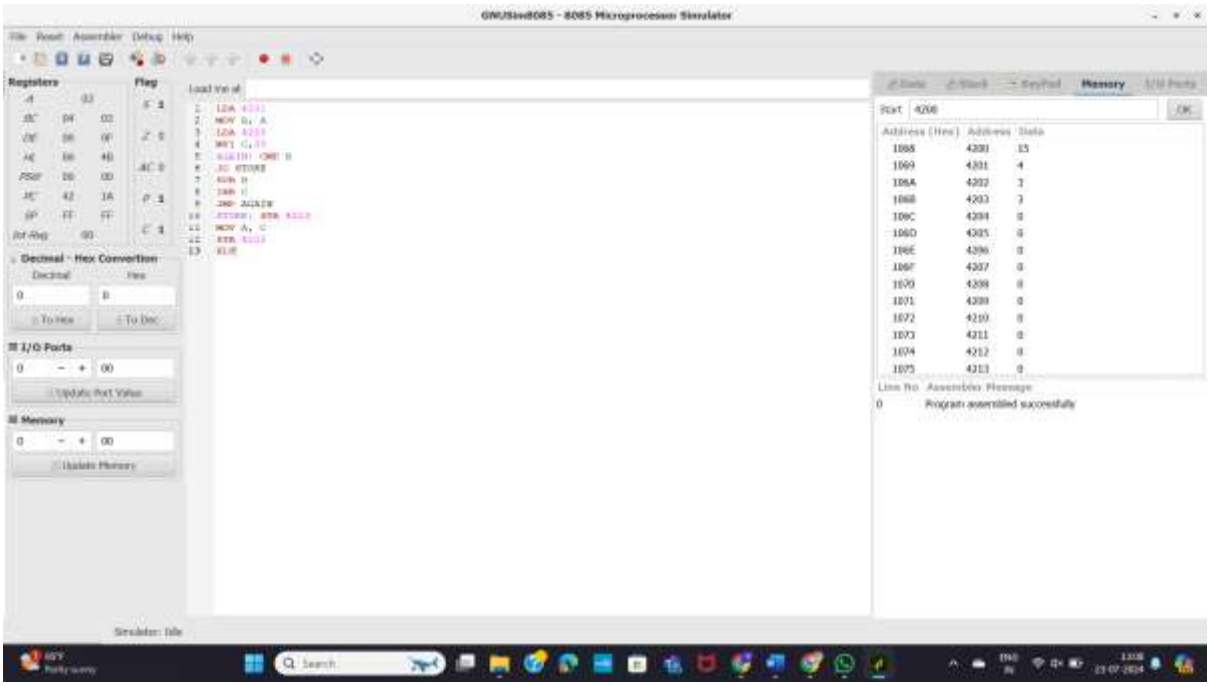
PROGRAM:

```
LDA 4201
MOV B, A
LDA 4200
MVI C,00
AGAIN: CMP B
JC STORE
SUB B
INR C
JMP AGAIN
STORE: STA 4203
MOV A, C
STA 4202
HLT
```

INPUT:

Address (Hex)	Address	Data
1068	4200	15
1069	4201	4
106A	4202	3
106B	4203	3
106C	4204	0

OUTPUT:



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