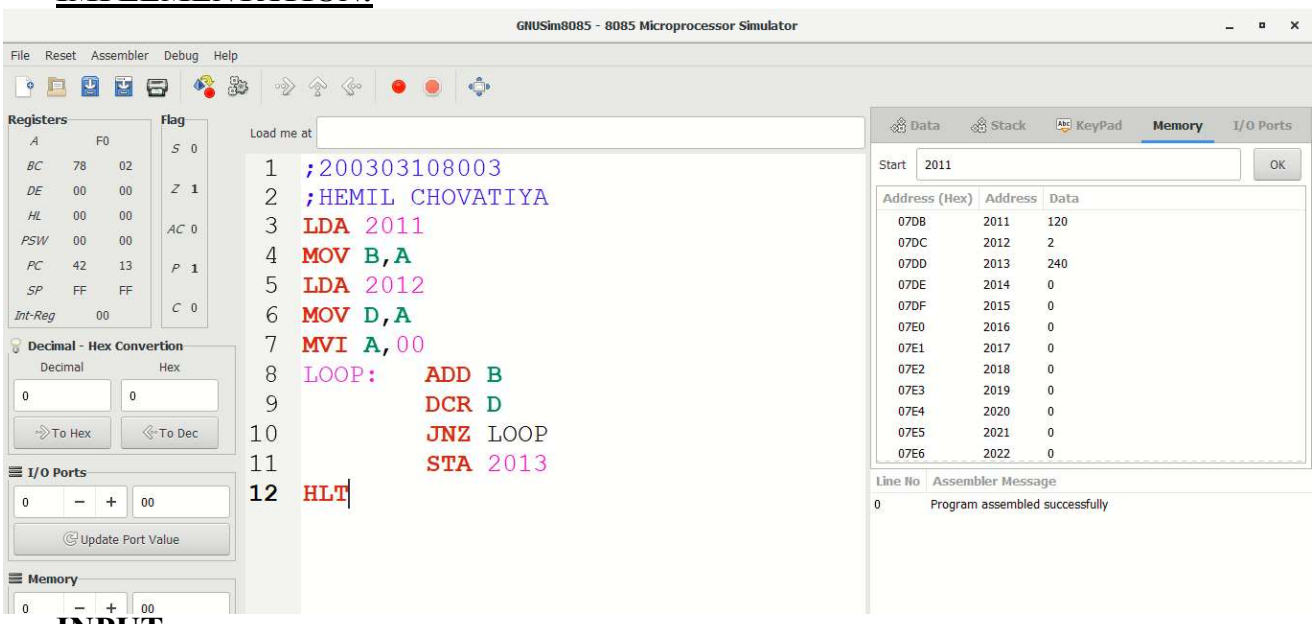
PRACTICAL 5

AIM: Write an assembly languagecode in GNUsim8085 to implement Multiplication of two 8bitNumbers.

THEORY

Code	Meaning
LDA 2011	Load value of memory location 2011 in Accumulator A
MOV B, A	Move data from memory to accumulator
STA 2013	Store accumulator contents in memory
MVI A,00	8-bit data is stored in the destination register or memory. (Move immediate 8-bit)
DCR D	Decrement register or memory by 1.
JNZ LOOP	Jump if No Zero (Z = 0) to LOOP
ADD B	Add data of memory with accumulator
HLT	Hold the program

IMPLEMENTATION:



INPUT:

2011 = 120
2012 = 2

OUTPUT:

2013 = 240

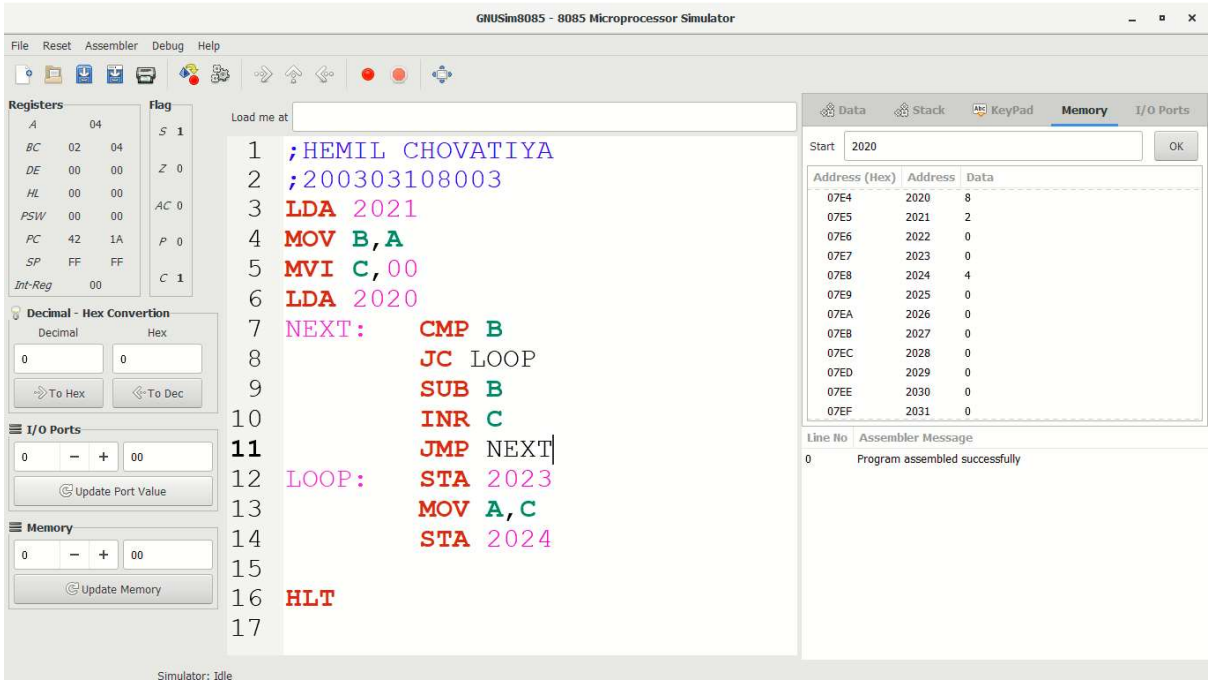
PRACTICAL 6

AIM: Write an assembly language code in GNUsim8085 to implement Division of two 8bit Numbers

THEORY

Code	Meaning
LDA 2021	Load value of memory location 2021 in Accumulator A
MOV B, A	Move data from memory to accumulator
MVI C,00	8-bit data is stored in the destination register or memory. (Move immediate 8-bit)
CMP B	Compare register or memorywith accumulator
JC LOOP	Jump if Carry CY=1
SUB B	Subtract register or memoryfrom accumulator
INR C	Increment register or memoryby 1
JMP NEXT	Jump unconditionally (16 Bit Address)
HLT	Hold the program

IMPLEMENTATION:



INPUT: 2020=8
2021=2

OUTPUT: 2023=0
2024=4