Faculty of Engineering & Technology Subject Name: Computer Organization & Architecture

Subject Code: 203105255

B.Tech.: IT Year: 2021-22 Semester: 4(ITA1)

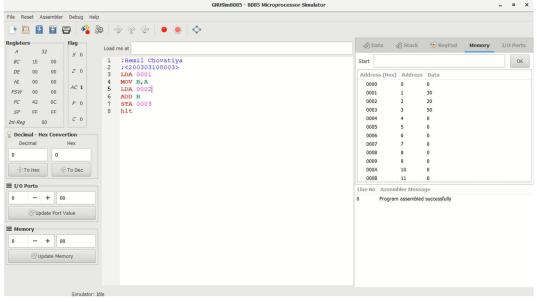
PRACTICAL 3

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

Theory:

Code	Meaning
LDA 0001	Load value of memory location 0001 in Accumulator A
MOV B,A	Move data from memory to accumulator
STA 0003	Store accumulator contents in memory
ADD B	Add data of memory with accumulator
HLT	Hold the program

Implementation:



Input:

0001 = 30

0002 = 20

Output:

0003 = 50

Enrollment No : 200303108003 Page | 22

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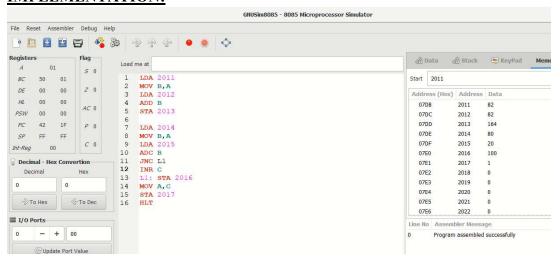
B.Tech.: <u>IT</u> Year: <u>2021-22</u> Semester: 4(ITA1)

PRACTICAL 4

<u>AIM:</u> Write an assembly language code in GNUsim8085 to implement Addition of two 16-bit Numbers. Theory:

Code	Meaning
LDA 2011	Load value of memory location 0001 in Accumulator A
MOV B, A	Move data from memory to accumulator
STA 0003	Store accumulator contents in memory
JNC L1	Jump if no carry CY = 0
INR C	Increment register or memory by 1
ADC B	Add register or memory to accumulator with carry
ADD B	Add data of memory with accumulator
HLT	Hold the program

IMPLEMENTATION:



INPUT: 2011=82

2012 = 82

2014=80

2015=20

OUTPUT: 2013=164

2016=100

2017=2

Enrollment No : 200303108003 Page | 23