Worksheet 3.2 or 9

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Branch: BE-CSE (LEET)
Section/Group: ON20BCS-809/A
Semester: 4th Sem
Date of Performance: 08/04/2022
Subject Name: MPI Lab
Subject Code: 22E-20CSP-253

1. Aim/Overview of the practical:

I. Find the smaller out of two numbers.
II. Find the larger out of two numbers.

2. Task to be done:

Write an 8085 Microprocessor program to find the smaller & higher number out of two number.

3. Apparatus/Simulator used (For applied/experimental sciences/materials-based labs):

I. 8085 Jubin simulator version 2 (Microprocessor Simulator)
II. Java (jdk/ jre1.8.0_321)

4. Algorithm/Flowchart (For programming-based labs):

Algorithm to Find the smaller out of two numbers:

I. Load the data to Memory from 1000 address using Immediate Instruction **LXI H, 1000**.
II. Move The data from Memory 1000 to Accumulator 'A'.
III. Increment the HL pair using **INX H**.
IV. Move The data from Memory 1001 to Register 'B'.
V. Compare Register B with Accumulator using **CMP B**.
VI. Check if Carry flag generated using **JC** Instruction.
VII. If carry flag generated and set to 1 jump to the label and store the value of Accumulator 'A' to 1002 using **STA 1002**.
VIII. If carry flag not generated then move the Register 'B' to Accumulator 'A' then store the value of Accumulator 'A' to 1002 using **STA 1002**.
IX. End the execution using HLT.

Algorithm to Find the larger out of two numbers:

I. Load the data to Memory from 1000 address using Immediate Instruction **LXI H, 1000**.
II. Move The data from Memory 1000 to Accumulator 'A'.
III. Increment the HL pair using **INX H**.

IV. Move The data from Memory 1001 to Register 'B'.

V. Compare Register B with Accumulator using **CMP B**.

VI. Check if Carry flag generated using **JNC** Instruction.

VII. If carry flag not generated jump to the label and store the value of Accumulator 'A' to 1002 using **STA 1002**.

VIII. If carry flag generated and set to 1 then move the Register 'B' to Accumulator 'A' then store the value of Accumulator 'A' to 1002 using **STA 1002**.

IX. End the execution using HLT.

5. Description/ Code:

Program to Find the smaller out of two numbers:

```
# ORG 0900H
          LXI H,1000
          MOV A, M
          INX H
          MOV B, M
          CMP B
          JC LABEL
          MOV A, B

LABEL:    STA 1002
          HLT
# ORG 1000
# DB D7H, F6H
```

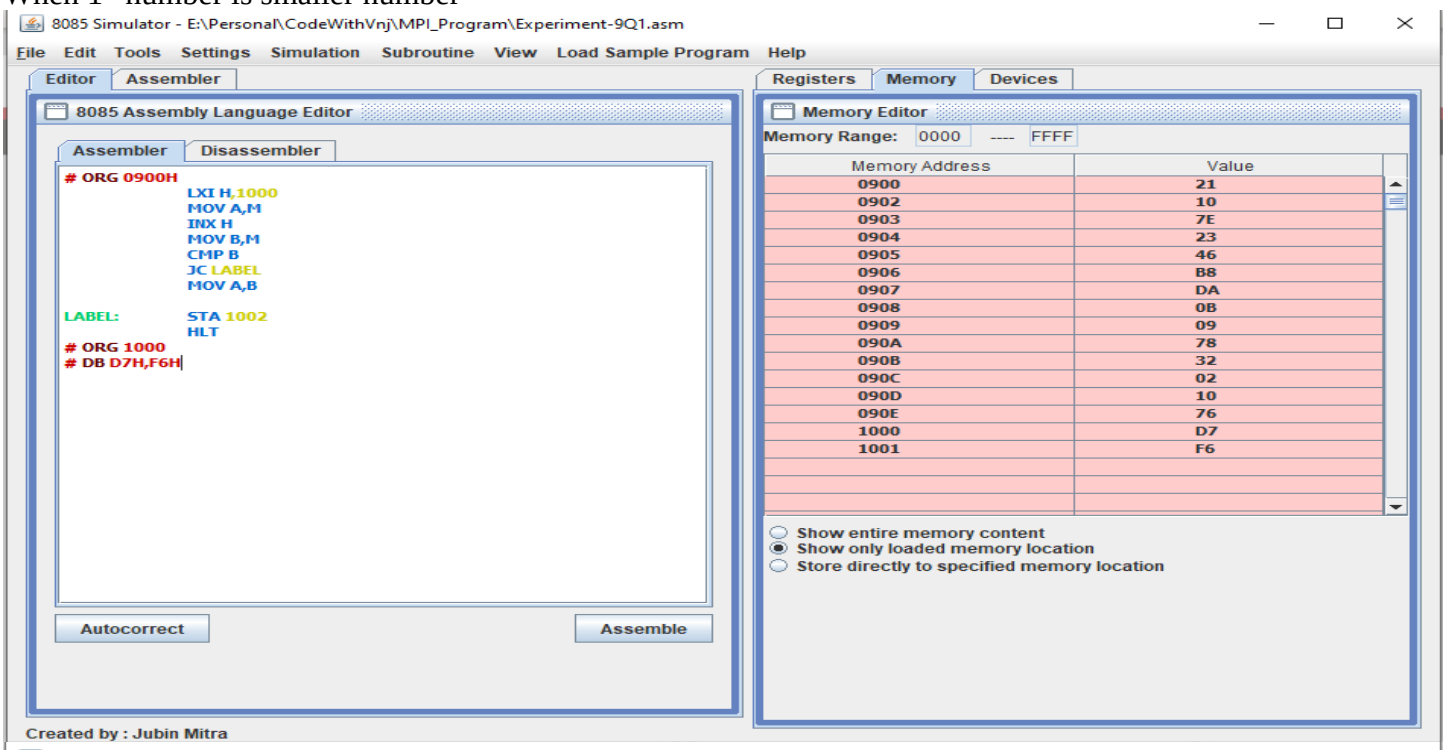
Program to Find the larger out of two numbers:

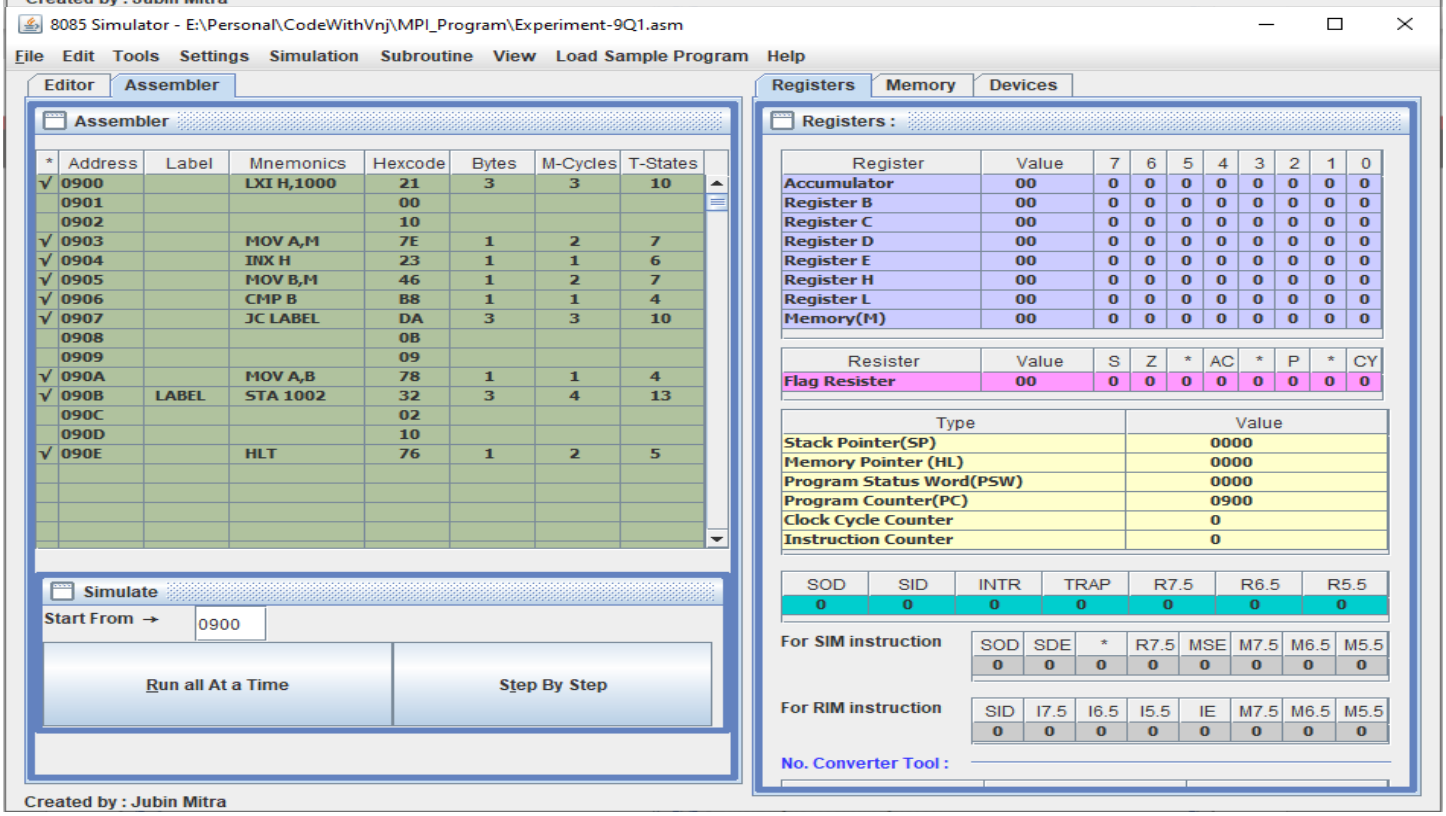
```
# ORG 0900H
          LXI H,1000
          MOV A, M
          INX H
          MOV B, M
          CMP B
          JNC LABEL
          MOV A, B

LABEL:    STA 1002
          HLT
# ORG 1000
# DB D7H, F6H
```

6. Result/Output/Writing Summary:

Output to Find the smaller out of two numbers:

When 1st number is smaller number





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Editor | Assembler

Assembler

*	Address	Label	Mnemonics	Hexcode	Bytes	M-Cycles	T-States
√	0900		LXI H,1000	21	3	3	10
	0901			00			
	0902			10			
√	0903		MOV A,M	7E	1	2	7
√	0904		INX H	23	1	1	6
√	0905		MOV B,M	46	1	2	7
√	0906		CMP B	B8	1	1	4
√	0907		JC LABEL	DA	3	3	10
	0908			0B			
	0909			09			
√	090A		MOV A,B	78	1	1	4
√	090B	LABEL	STA 1002	32	3	4	13
	090C			02			
	090D			10			
√	090E		HLT	76	1	2	5

Simulate

Start From → 0900

Backward | Stop | Forward

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Registers | Memory | Devices

Registers :

Register	Value	7	6	5	4	3	2	1	0
Accumulator	00	0	0	0	0	0	0	0	0
Register B	00	0	0	0	0	0	0	0	0
Register C	00	0	0	0	0	0	0	0	0
Register D	00	0	0	0	0	0	0	0	0
Register E	00	0	0	0	0	0	0	0	0
Register H	10	0	0	0	1	0	0	0	0
Register L	00	0	0	0	0	0	0	0	0
Memory(M)	D7	1	1	0	1	0	1	1	1

Resister	Value	S	Z	*	AC	*	P	*	CY
Flag Resister	00	0	0	0	0	0	0	0	0

Type	Value
Stack Pointer(SP)	0000
Memory Pointer (HL)	1000
Program Status Word(PSW)	0000
Program Counter(PC)	0903
Clock Cycle Counter	10
Instruction Counter	1

SOD	SID	INTR	TRAP	R7.5	R6.5	R5.5
0	0	0	0	0	0	0

For SIM instruction

SOD	SDE	*	R7.5	MSE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

For RIM instruction

SID	I7.5	I6.5	I5.5	IE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

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Assembler

*	Address	Label	Mnemonics	Hexcode	Bytes	M-Cycles	T-States
√	0900		LXI H,1000	21	3	3	10
	0901			00			
	0902			10			
√	0903		MOV A,M	7E	1	2	7
√	0904		INX H	23	1	1	6
√	0905		MOV B,M	46	1	2	7
√	0906		CMP B	B8	1	1	4
√	0907		JC LABEL	DA	3	3	10
	0908			0B			
	0909			09			
√	090A		MOV A,B	78	1	1	4
√	090B	LABEL	STA 1002	32	3	4	13
	090C			02			
	090D			10			
√	090E		HLT	76	1	2	5

Simulate

Start From → 0900

Backward | Stop | Forward

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Registers | Memory | Devices

Registers :

Register	Value	7	6	5	4	3	2	1	0
Accumulator	D7	1	1	0	1	0	1	1	1
Register B	00	0	0	0	0	0	0	0	0
Register C	00	0	0	0	0	0	0	0	0
Register D	00	0	0	0	0	0	0	0	0
Register E	00	0	0	0	0	0	0	0	0
Register H	10	0	0	0	1	0	0	0	0
Register L	00	0	0	0	0	0	0	0	0
Memory(M)	D7	1	1	0	1	0	1	1	1

Resister	Value	S	Z	*	AC	*	P	*	CY
Flag Resister	00	0	0	0	0	0	0	0	0

Type	Value
Stack Pointer(SP)	0000
Memory Pointer (HL)	1000
Program Status Word(PSW)	D700
Program Counter(PC)	0904
Clock Cycle Counter	17
Instruction Counter	2

SOD	SID	INTR	TRAP	R7.5	R6.5	R5.5
0	0	0	0	0	0	0

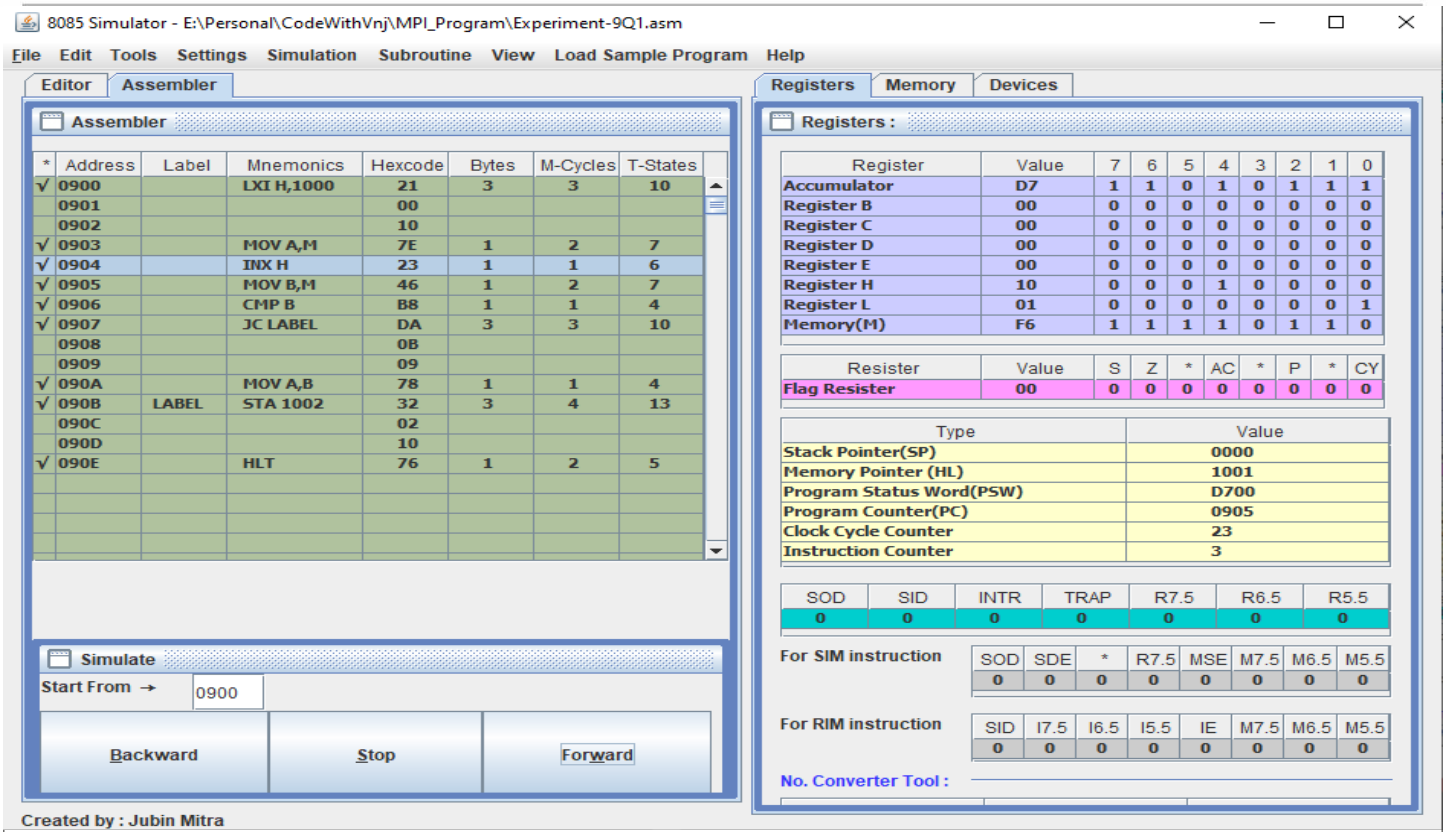
For SIM instruction

SOD	SDE	*	R7.5	MSE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

For RIM instruction

SID	I7.5	I6.5	I5.5	IE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

No. Converter Tool :



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Assembler

*	Address	Label	Mnemonics	Hexcode	Bytes	M-Cycles	T-States
√	0900		LXI H,1000	21	3	3	10
	0901			00			
	0902			10			
√	0903		MOV A,M	7E	1	2	7
√	0904		INX H	23	1	1	6
√	0905		MOV B,M	46	1	2	7
√	0906		CMP B	B8	1	1	4
√	0907		JC LABEL	DA	3	3	10
	0908			0B			
	0909			09			
√	090A		MOV A,B	78	1	1	4
√	090B	LABEL	STA 1002	32	3	4	13
	090C			02			
	090D			10			
√	090E		HLT	76	1	2	5

Simulate

Start From → 0900

Backward | Stop | Forward

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Registers | Memory | Devices

Registers :

Register	Value	7	6	5	4	3	2	1	0
Accumulator	D7	1	1	0	1	0	1	1	1
Register B	00	0	0	0	0	0	0	0	0
Register C	00	0	0	0	0	0	0	0	0
Register D	00	0	0	0	0	0	0	0	0
Register E	00	0	0	0	0	0	0	0	0
Register H	10	0	0	0	1	0	0	0	0
Register L	01	0	0	0	0	0	0	0	1
Memory(M)	F6	1	1	1	1	0	1	1	0

Resister	Value	S	Z	*	AC	*	P	*	CY
Flag Resister	00	0	0	0	0	0	0	0	0

Type	Value
Stack Pointer(SP)	0000
Memory Pointer (HL)	1001
Program Status Word(PSW)	D700
Program Counter(PC)	0905
Clock Cycle Counter	23
Instruction Counter	3

SOD	SID	INTR	TRAP	R7.5	R6.5	R5.5
0	0	0	0	0	0	0

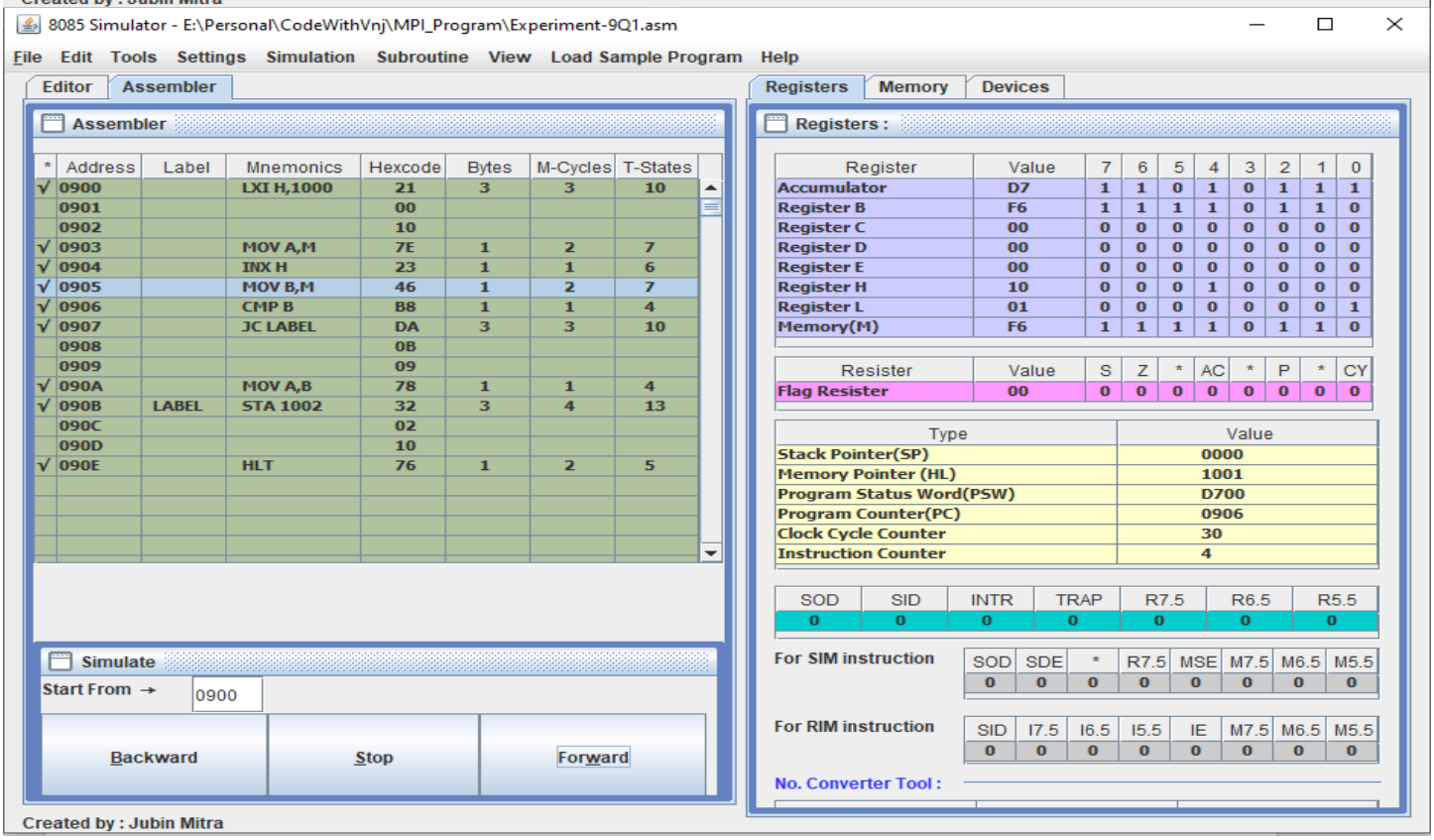
For SIM instruction

SOD	SDE	*	R7.5	MSE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

For RIM instruction

SID	I7.5	I6.5	I5.5	IE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

No. Converter Tool :



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*	Address	Label	Mnemonics	Hexcode	Bytes	M-Cycles	T-States
√	0900		LXI H,1000	21	3	3	10
	0901			00			
	0902			10			
√	0903		MOV A,M	7E	1	2	7
√	0904		INX H	23	1	1	6
√	0905		MOV B,M	46	1	2	7
√	0906		CMP B	B8	1	1	4
√	0907		JC LABEL	DA	3	3	10
	0908			0B			
	0909			09			
√	090A		MOV A,B	78	1	1	4
√	090B	LABEL	STA 1002	32	3	4	13
	090C			02			
	090D			10			
√	090E		HLT	76	1	2	5

Simulate

Start From → 0900

Backward | Stop | Forward

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Registers | Memory | Devices

Registers :

Register	Value	7	6	5	4	3	2	1	0
Accumulator	D7	1	1	0	1	0	1	1	1
Register B	F6	1	1	1	1	0	1	1	0
Register C	00	0	0	0	0	0	0	0	0
Register D	00	0	0	0	0	0	0	0	0
Register E	00	0	0	0	0	0	0	0	0
Register H	10	0	0	0	1	0	0	0	0
Register L	01	0	0	0	0	0	0	0	1
Memory(M)	F6	1	1	1	1	0	1	1	0

Resister	Value	S	Z	*	AC	*	P	*	CY
Flag Resister	00	0	0	0	0	0	0	0	0

Type	Value
Stack Pointer(SP)	0000
Memory Pointer (HL)	1001
Program Status Word(PSW)	D700
Program Counter(PC)	0906
Clock Cycle Counter	30
Instruction Counter	4

SOD	SID	INTR	TRAP	R7.5	R6.5	R5.5
0	0	0	0	0	0	0

For SIM instruction

SOD	SDE	*	R7.5	MSE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

For RIM instruction

SID	I7.5	I6.5	I5.5	IE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

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Assembler

*	Address	Label	Mnemonics	Hexcode	Bytes	M-Cycles	T-States
√	0900		LXI H,1000	21	3	3	10
	0901			00			
	0902			10			
√	0903		MOV A,M	7E	1	2	7
√	0904		INX H	23	1	1	6
√	0905		MOV B,M	46	1	2	7
√	0906		CMP B	B8	1	1	4
√	0907		JC LABEL	DA	3	3	10
	0908			0B			
	0909			09			
√	090A		MOV A,B	78	1	1	4
√	090B	LABEL	STA 1002	32	3	4	13
	090C			02			
	090D			10			
√	090E		HLT	76	1	2	5

Simulate

Start From → 0900

Backward | Stop | Forward

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Registers | Memory | Devices

Registers :

Register	Value	7	6	5	4	3	2	1	0
Accumulator	D7	1	1	0	1	0	1	1	1
Register B	F6	1	1	1	1	0	1	1	0
Register C	00	0	0	0	0	0	0	0	0
Register D	00	0	0	0	0	0	0	0	0
Register E	00	0	0	0	0	0	0	0	0
Register H	10	0	0	0	1	0	0	0	0
Register L	01	0	0	0	0	0	0	0	1
Memory(M)	F6	1	1	1	1	0	1	1	0

Resister	Value	S	Z	*	AC	*	P	*	CY
Flag Resister	95	1	0	0	1	0	1	0	1

Type	Value
Stack Pointer(SP)	0000
Memory Pointer (HL)	1001
Program Status Word(PSW)	D795
Program Counter(PC)	0907
Clock Cycle Counter	34
Instruction Counter	5

SOD	SID	INTR	TRAP	R7.5	R6.5	R5.5
0	0	0	0	0	0	0

For SIM instruction

SOD	SDE	*	R7.5	MSE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

For RIM instruction

SID	I7.5	I6.5	I5.5	IE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

No. Converter Tool :

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Assembler

*	Address	Label	Mnemonics	Hexcode	Bytes	M-Cycles	T-States
√	0900		LXI H,1000	21	3	3	10
	0901			00			
	0902			10			
√	0903		MOV A,M	7E	1	2	7
√	0904		INX H	23	1	1	6
√	0905		MOV B,M	46	1	2	7
√	0906		CMP B	B8	1	1	4
√	0907		JC LABEL	DA	3	3	10
	0908			0B			
	0909			09			
√	090A		MOV A,B	78	1	1	4
√	090B	LABEL	STA 1002	32	3	4	13
	090C			02			
	090D			10			
√	090E		HLT	76	1	2	5

Simulate

Start From → 0900

Backward | Stop | Forward

Created by : Jubin Mitra

Registers | Memory | Devices

Registers :

Register	Value	7	6	5	4	3	2	1	0
Accumulator	D7	1	1	0	1	0	1	1	1
Register B	F6	1	1	1	1	0	1	1	0
Register C	00	0	0	0	0	0	0	0	0
Register D	00	0	0	0	0	0	0	0	0
Register E	00	0	0	0	0	0	0	0	0
Register H	10	0	0	0	1	0	0	0	0
Register L	01	0	0	0	0	0	0	0	1
Memory(M)	F6	1	1	1	1	0	1	1	0

Resister	Value	S	Z	*	AC	*	P	*	CY
Flag Resister	95	1	0	0	1	0	1	0	1

Type	Value
Stack Pointer(SP)	0000
Memory Pointer (HL)	1001
Program Status Word(PSW)	D795
Program Counter(PC)	090B
Clock Cycle Counter	44
Instruction Counter	6

SOD	SID	INTR	TRAP	R7.5	R6.5	R5.5
0	0	0	0	0	0	0

For SIM instruction

SOD	SDE	*	R7.5	MSE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

For RIM instruction

SID	I7.5	I6.5	I5.5	IE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

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*	Address	Label	Mnemonics	Hexcode	Bytes	M-Cycles	T-States
√	0900		LXI H,1000	21	3	3	10
	0901			00			
	0902			10			
√	0903		MOV A,M	7E	1	2	7
√	0904		INX H	23	1	1	6
√	0905		MOV B,M	46	1	2	7
√	0906		CMP B	B8	1	1	4
√	0907		JC LABEL	DA	3	3	10
	0908			0B			
	0909			09			
√	090A		MOV A,B	78	1	1	4
√	090B	LABEL	STA 1002	32	3	4	13
	090C			02			
	090D			10			
√	090E		HLT	76	1	2	5

Simulate

Start From → 0900

Backward | Stop | Forward

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Registers | Memory | Devices

Registers :

Register	Value	7	6	5	4	3	2	1	0
Accumulator	D7	1	1	0	1	0	1	1	1
Register B	F6	1	1	1	1	0	1	1	0
Register C	00	0	0	0	0	0	0	0	0
Register D	00	0	0	0	0	0	0	0	0
Register E	00	0	0	0	0	0	0	0	0
Register H	10	0	0	0	1	0	0	0	0
Register L	01	0	0	0	0	0	0	0	1
Memory(M)	F6	1	1	1	1	0	1	1	0

Resister	Value	S	Z	*	AC	*	P	*	CY
Flag Resister	95	1	0	0	1	0	1	0	1

Type	Value
Stack Pointer(SP)	0000
Memory Pointer (HL)	1001
Program Status Word(PSW)	D795
Program Counter(PC)	090E
Clock Cycle Counter	57
Instruction Counter	7

SOD	SID	INTR	TRAP	R7.5	R6.5	R5.5
0	0	0	0	0	0	0

For SIM instruction

SOD	SDE	*	R7.5	MSE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

For RIM instruction

SID	I7.5	I6.5	I5.5	IE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

No. Converter Tool :

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Assembler

*	Address	Label	Mnemonics	Hexcode	Bytes	M-Cycles	T-States
√	0900		LXI H,1000	21	3	3	10
	0901			00			
	0902			10			
√	0903		MOV A,M	7E	1	2	7
√	0904		INX H	23	1	1	6
√	0905		MOV B,M	46	1	2	7
√	0906		CMP B	B8	1	1	4
√	0907		JC LABEL	DA	3	3	10
	0908			0B			
	0909			09			
√	090A		MOV A,B	78	1	1	4
√	090B	LABEL	STA 1002	32	3	4	13
	090C			02			
	090D			10			
√	090E		HLT	76	1	2	5

Simulate

Start From → 0900

Backward | Stop | Forward

Created by : Jubin Mitra

Registers | Memory | Devices

Memory Editor

Memory Range: 0000 ---- FFFF

Memory Address	Value
0900	21
0902	10
0903	7E
0904	23
0905	46
0906	B8
0907	DA
0908	0B
0909	09
090A	78
090B	32
090C	02
090D	10
090E	76
1000	D7
1001	F6
1002	D7

- ○ Show entire memory content
- ◉ Show only loaded memory location
- ○ Store directly to specified memory location

When 2nd number is smaller number

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Editor Assembler

8085 Assembly Language Editor

Assembler Disassembler

```
# ORG 0900H
        LXI H,1000
        MOV A,M
        INX H
        MOV B,M
        CMP B
        JC LABEL
        MOV A,B

LABEL:  STA 1002
        HLT
# ORG 1000
# DB FFH,F6H
```

Autocorrect Assemble

Registers Memory Devices

Memory Editor

Memory Range: 0000 ---- FFFF

Memory Address	Value
0900	21
0902	10
0903	7E
0904	23
0905	46
0906	B8
0907	DA
0908	0B
0909	09
090A	78
090B	32
090C	02
090D	10
090E	76
1000	FF
1001	F6

Show entire memory content
Show only loaded memory location
Store directly to specified memory location

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Registers Memory Devices

Assembler

*	Address	Label	Mnemonics	Hexcode	Bytes	M-Cycles	T-States
√	0900		LXI H,1000	21	3	3	10
	0901			00			
	0902			10			
√	0903		MOV A,M	7E	1	2	7
√	0904		INX H	23	1	1	6
√	0905		MOV B,M	46	1	2	7
√	0906		CMP B	B8	1	1	4
√	0907		JC LABEL	DA	3	3	10
	0908			0B			
	0909			09			
√	090A		MOV A,B	78	1	1	4
√	090B	LABEL	STA 1002	32	3	4	13
	090C			02			
	090D			10			
√	090E		HLT	76	1	2	5

Simulate

Start From → 0900

Run all At a Time | Step By Step

Registers :

Register	Value	7	6	5	4	3	2	1	0
Accumulator	00	0	0	0	0	0	0	0	0
Register B	00	0	0	0	0	0	0	0	0
Register C	00	0	0	0	0	0	0	0	0
Register D	00	0	0	0	0	0	0	0	0
Register E	00	0	0	0	0	0	0	0	0
Register H	00	0	0	0	0	0	0	0	0
Register L	00	0	0	0	0	0	0	0	0
Memory(M)	00	0	0	0	0	0	0	0	0

Resister	Value	S	Z	*	AC	*	P	*	CY
Flag Resister	00	0	0	0	0	0	0	0	0

Type	Value
Stack Pointer(SP)	0000
Memory Pointer (HL)	0000
Program Status Word(PSW)	0000
Program Counter(PC)	0900
Clock Cycle Counter	0
Instruction Counter	0

SOD	SID	INTR	TRAP	R7.5	R6.5	R5.5
0	0	0	0	0	0	0

For SIM instruction

SOD	SDE	*	R7.5	MSE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

For RIM instruction

SID	I7.5	I6.5	I5.5	IE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

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Assembler

*	Address	Label	Mnemonics	Hexcode	Bytes	M-Cycles	T-States
√	0900		LXI H,1000	21	3	3	10
	0901			00			
	0902			10			
√	0903		MOV A,M	7E	1	2	7
√	0904		INX H	23	1	1	6
√	0905		MOV B,M	46	1	2	7
√	0906		CMP B	B8	1	1	4
√	0907		JC LABEL	DA	3	3	10
	0908			0B			
	0909			09			
√	090A		MOV A,B	78	1	1	4
√	090B	LABEL	STA 1002	32	3	4	13
	090C			02			
	090D			10			
√	090E		HLT	76	1	2	5

Simulate

Start From → 0900

Backward | Stop | Forward

Registers | Memory | Devices

Registers :

Register	Value	7	6	5	4	3	2	1	0
Accumulator	00	0	0	0	0	0	0	0	0
Register B	00	0	0	0	0	0	0	0	0
Register C	00	0	0	0	0	0	0	0	0
Register D	00	0	0	0	0	0	0	0	0
Register E	00	0	0	0	0	0	0	0	0
Register H	10	0	0	0	1	0	0	0	0
Register L	00	0	0	0	0	0	0	0	0
Memory(M)	FF	1	1	1	1	1	1	1	1

Resister	Value	S	Z	*	AC	*	P	*	CY
Flag Resister	00	0	0	0	0	0	0	0	0

Type	Value
Stack Pointer(SP)	0000
Memory Pointer (HL)	1000
Program Status Word(PSW)	0000
Program Counter(PC)	0903
Clock Cycle Counter	10
Instruction Counter	1

SOD	SID	INTR	TRAP	R7.5	R6.5	R5.5
0	0	0	0	0	0	0

For SIM instruction

SOD	SDE	*	R7.5	MSE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

For RIM instruction

SID	I7.5	I6.5	I5.5	IE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

No. Converter Tool :

Hexadecimal	Decimal	Binary
0	0	0

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Assembler

*	Address	Label	Mnemonics	Hexcode	Bytes	M-Cycles	T-States
√	0900		LXI H,1000	21	3	3	10
	0901			00			
	0902			10			
√	0903		MOV A,M	7E	1	2	7
√	0904		INX H	23	1	1	6
√	0905		MOV B,M	46	1	2	7
√	0906		CMP B	B8	1	1	4
√	0907		JC LABEL	DA	3	3	10
	0908			0B			
	0909			09			
√	090A		MOV A,B	78	1	1	4
√	090B	LABEL	STA 1002	32	3	4	13
	090C			02			
	090D			10			
√	090E		HLT	76	1	2	5

Simulate

Start From → 0900

Backward | Stop | Forward

Registers | Memory | Devices

Registers :

Register	Value	7	6	5	4	3	2	1	0
Accumulator	FF	1	1	1	1	1	1	1	1
Register B	00	0	0	0	0	0	0	0	0
Register C	00	0	0	0	0	0	0	0	0
Register D	00	0	0	0	0	0	0	0	0
Register E	00	0	0	0	0	0	0	0	0
Register H	10	0	0	0	1	0	0	0	0
Register L	00	0	0	0	0	0	0	0	0
Memory(M)	FF	1	1	1	1	1	1	1	1

Resister	Value	S	Z	*	AC	*	P	*	CY
Flag Resister	00	0	0	0	0	0	0	0	0

Type	Value
Stack Pointer(SP)	0000
Memory Pointer (HL)	1000
Program Status Word(PSW)	FF00
Program Counter(PC)	0904
Clock Cycle Counter	17
Instruction Counter	2

SOD	SID	INTR	TRAP	R7.5	R6.5	R5.5
0	0	0	0	0	0	0

For SIM instruction

SOD	SDE	*	R7.5	MSE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

For RIM instruction

SID	I7.5	I6.5	I5.5	IE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

No. Converter Tool :

Hexadecimal	Decimal	Binary
0	0	0

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Assembler

*	Address	Label	Mnemonics	Hexcode	Bytes	M-Cycles	T-States
√	0900		LXI H,1000	21	3	3	10
	0901			00			
	0902			10			
√	0903		MOV A,M	7E	1	2	7
√	0904		INX H	23	1	1	6
√	0905		MOV B,M	46	1	2	7
√	0906		CMP B	B8	1	1	4
√	0907		JC LABEL	DA	3	3	10
	0908			0B			
	0909			09			
√	090A		MOV A,B	78	1	1	4
√	090B	LABEL	STA 1002	32	3	4	13
	090C			02			
	090D			10			
√	090E		HLT	76	1	2	5

Simulate

Start From → 0900

Backward | Stop | Forward

Created by : Jubin Mitra

Registers | Memory | Devices

Registers :

Register	Value	7	6	5	4	3	2	1	0
Accumulator	FF	1	1	1	1	1	1	1	1
Register B	00	0	0	0	0	0	0	0	0
Register C	00	0	0	0	0	0	0	0	0
Register D	00	0	0	0	0	0	0	0	0
Register E	00	0	0	0	0	0	0	0	0
Register H	10	0	0	0	1	0	0	0	0
Register L	01	0	0	0	0	0	0	0	1
Memory(M)	F6	1	1	1	1	0	1	1	0

Resister	Value	S	Z	*	AC	*	P	*	CY
Flag Resister	00	0	0	0	0	0	0	0	0

Type	Value
Stack Pointer(SP)	0000
Memory Pointer (HL)	1001
Program Status Word(PSW)	FF00
Program Counter(PC)	0905
Clock Cycle Counter	23
Instruction Counter	3

SOD	SID	INTR	TRAP	R7.5	R6.5	R5.5
0	0	0	0	0	0	0

For SIM instruction

SOD	SDE	*	R7.5	MSE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

For RIM instruction

SID	I7.5	I6.5	I5.5	IE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

No. Converter Tool :

Hexadecimal	Decimal	Binary
0	0	0

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Assembler

*	Address	Label	Mnemonics	Hexcode	Bytes	M-Cycles	T-States
√	0900		LXI H,1000	21	3	3	10
	0901			00			
	0902			10			
√	0903		MOV A,M	7E	1	2	7
√	0904		INX H	23	1	1	6
√	0905		MOV B,M	46	1	2	7
√	0906		CMP B	B8	1	1	4
√	0907		JC LABEL	DA	3	3	10
	0908			0B			
	0909			09			
√	090A		MOV A,B	78	1	1	4
√	090B	LABEL	STA 1002	32	3	4	13
	090C			02			
	090D			10			
√	090E		HLT	76	1	2	5

Simulate

Start From → 0900

Backward | Stop | Forward

Created by : Jubin Mitra

Registers | Memory | Devices

Registers :

Register	Value	7	6	5	4	3	2	1	0
Accumulator	FF	1	1	1	1	1	1	1	1
Register B	F6	1	1	1	1	0	1	1	0
Register C	00	0	0	0	0	0	0	0	0
Register D	00	0	0	0	0	0	0	0	0
Register E	00	0	0	0	0	0	0	0	0
Register H	10	0	0	0	1	0	0	0	0
Register L	01	0	0	0	0	0	0	0	1
Memory(M)	F6	1	1	1	1	0	1	1	0

Resister	Value	S	Z	*	AC	*	P	*	CY
Flag Resister	00	0	0	0	0	0	0	0	0

Type	Value
Stack Pointer(SP)	0000
Memory Pointer (HL)	1001
Program Status Word(PSW)	FF00
Program Counter(PC)	0906
Clock Cycle Counter	30
Instruction Counter	4

SOD	SID	INTR	TRAP	R7.5	R6.5	R5.5
0	0	0	0	0	0	0

For SIM instruction

SOD	SDE	*	R7.5	MSE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

For RIM instruction

SID	I7.5	I6.5	I5.5	IE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

No. Converter Tool :

Hexadecimal	Decimal	Binary
0	0	0

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Assembler

*	Address	Label	Mnemonics	Hexcode	Bytes	M-Cycles	T-States
√	0900		LXI H,1000	21	3	3	10
	0901			00			
	0902			10			
√	0903		MOV A,M	7E	1	2	7
√	0904		INX H	23	1	1	6
√	0905		MOV B,M	46	1	2	7
√	0906		CMP B	B8	1	1	4
√	0907		JC LABEL	DA	3	3	10
	0908			0B			
	0909			09			
√	090A		MOV A,B	78	1	1	4
√	090B	LABEL	STA 1002	32	3	4	13
	090C			02			
	090D			10			
√	090E		HLT	76	1	2	5

Simulate

Start From → 0900

Backward | Stop | Forward

Registers | Memory | Devices

Registers :

Register	Value	7	6	5	4	3	2	1	0
Accumulator	FF	1	1	1	1	1	1	1	1
Register B	F6	1	1	1	1	0	1	1	0
Register C	00	0	0	0	0	0	0	0	0
Register D	00	0	0	0	0	0	0	0	0
Register E	00	0	0	0	0	0	0	0	0
Register H	10	0	0	0	1	0	0	0	0
Register L	01	0	0	0	0	0	0	0	1
Memory(M)	F6	1	1	1	1	0	1	1	0

Resister	Value	S	Z	*	AC	*	P	*	CY
Flag Resister	14	0	0	0	1	0	1	0	0

Type	Value
Stack Pointer(SP)	0000
Memory Pointer (HL)	1001
Program Status Word(PSW)	FF14
Program Counter(PC)	0907
Clock Cycle Counter	34
Instruction Counter	5

SOD	SID	INTR	TRAP	R7.5	R6.5	R5.5
0	0	0	0	0	0	0

For SIM instruction

SOD	SDE	*	R7.5	MSE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

For RIM instruction

SID	I7.5	I6.5	I5.5	IE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

No. Converter Tool :

Hexadecimal	Decimal	Binary
0	0	0

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*	Address	Label	Mnemonics	Hexcode	Bytes	M-Cycles	T-States
√	0900		LXI H,1000	21	3	3	10
	0901			00			
	0902			10			
√	0903		MOV A,M	7E	1	2	7
√	0904		INX H	23	1	1	6
√	0905		MOV B,M	46	1	2	7
√	0906		CMP B	B8	1	1	4
√	0907		JC LABEL	DA	3	3	10
	0908			0B			
	0909			09			
√	090A		MOV A,B	78	1	1	4
√	090B	LABEL	STA 1002	32	3	4	13
	090C			02			
	090D			10			
√	090E		HLT	76	1	2	5

Simulate

Start From → 0900

Backward | Stop | Forward

Registers | Memory | Devices

Registers :

Register	Value	7	6	5	4	3	2	1	0
Accumulator	FF	1	1	1	1	1	1	1	1
Register B	F6	1	1	1	1	0	1	1	0
Register C	00	0	0	0	0	0	0	0	0
Register D	00	0	0	0	0	0	0	0	0
Register E	00	0	0	0	0	0	0	0	0
Register H	10	0	0	0	1	0	0	0	0
Register L	01	0	0	0	0	0	0	0	1
Memory(M)	F6	1	1	1	1	0	1	1	0

Resister	Value	S	Z	*	AC	*	P	*	CY
Flag Resister	14	0	0	0	1	0	1	0	0

Type	Value
Stack Pointer(SP)	0000
Memory Pointer (HL)	1001
Program Status Word(PSW)	FF14
Program Counter(PC)	090A
Clock Cycle Counter	41
Instruction Counter	6

SOD	SID	INTR	TRAP	R7.5	R6.5	R5.5
0	0	0	0	0	0	0

For SIM instruction

SOD	SDE	*	R7.5	MSE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

For RIM instruction

SID	I7.5	I6.5	I5.5	IE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

No. Converter Tool :

Hexadecimal	Decimal	Binary
0	0	0

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Assembler

*	Address	Label	Mnemonics	Hexcode	Bytes	M-Cycles	T-States
√	0900		LXI H,1000	21	3	3	10
	0901			00			
	0902			10			
√	0903		MOV A,M	7E	1	2	7
√	0904		INX H	23	1	1	6
√	0905		MOV B,M	46	1	2	7
√	0906		CMP B	B8	1	1	4
√	0907		JC LABEL	DA	3	3	10
	0908			0B			
	0909			09			
√	090A		MOV A,B	78	1	1	4
√	090B	LABEL	STA 1002	32	3	4	13
	090C			02			
	090D			10			
√	090E		HLT	76	1	2	5

Simulate

Start From → 0900

Backward | Stop | Forward

Registers | Memory | Devices

Registers :

Register	Value	7	6	5	4	3	2	1	0
Accumulator	F6	1	1	1	1	0	1	1	0
Register B	F6	1	1	1	1	0	1	1	0
Register C	00	0	0	0	0	0	0	0	0
Register D	00	0	0	0	0	0	0	0	0
Register E	00	0	0	0	0	0	0	0	0
Register H	10	0	0	0	1	0	0	0	0
Register L	01	0	0	0	0	0	0	0	1
Memory(M)	F6	1	1	1	1	0	1	1	0

Resister	Value	S	Z	*	AC	*	P	*	CY
Flag Resister	14	0	0	0	1	0	1	0	0

Type	Value
Stack Pointer(SP)	0000
Memory Pointer (HL)	1001
Program Status Word(PSW)	F614
Program Counter(PC)	090B
Clock Cycle Counter	45
Instruction Counter	7

SOD	SID	INTR	TRAP	R7.5	R6.5	R5.5
0	0	0	0	0	0	0

For SIM instruction

SOD	SDE	*	R7.5	MSE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

For RIM instruction

SID	I7.5	I6.5	I5.5	IE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

No. Converter Tool :

Hexadecimal	Decimal	Binary
0	0	0

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Assembler

*	Address	Label	Mnemonics	Hexcode	Bytes	M-Cycles	T-States
√	0900		LXI H,1000	21	3	3	10
	0901			00			
	0902			10			
√	0903		MOV A,M	7E	1	2	7
√	0904		INX H	23	1	1	6
√	0905		MOV B,M	46	1	2	7
√	0906		CMP B	B8	1	1	4
√	0907		JC LABEL	DA	3	3	10
	0908			0B			
	0909			09			
√	090A		MOV A,B	78	1	1	4
√	090B	LABEL	STA 1002	32	3	4	13
	090C			02			
	090D			10			
√	090E		HLT	76	1	2	5

Simulate

Start From → 0900

Backward | Stop | Forward

Registers | Memory | Devices

Registers :

Register	Value	7	6	5	4	3	2	1	0
Accumulator	F6	1	1	1	1	0	1	1	0
Register B	F6	1	1	1	1	0	1	1	0
Register C	00	0	0	0	0	0	0	0	0
Register D	00	0	0	0	0	0	0	0	0
Register E	00	0	0	0	0	0	0	0	0
Register H	10	0	0	0	1	0	0	0	0
Register L	01	0	0	0	0	0	0	0	1
Memory(M)	F6	1	1	1	1	0	1	1	0

Resister	Value	S	Z	*	AC	*	P	*	CY
Flag Resister	14	0	0	0	1	0	1	0	0

Type	Value
Stack Pointer(SP)	0000
Memory Pointer (HL)	1001
Program Status Word(PSW)	F614
Program Counter(PC)	090E
Clock Cycle Counter	58
Instruction Counter	8

SOD	SID	INTR	TRAP	R7.5	R6.5	R5.5
0	0	0	0	0	0	0

For SIM instruction

SOD	SDE	*	R7.5	MSE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

For RIM instruction

SID	I7.5	I6.5	I5.5	IE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

No. Converter Tool :

Hexadecimal	Decimal	Binary
0	0	0

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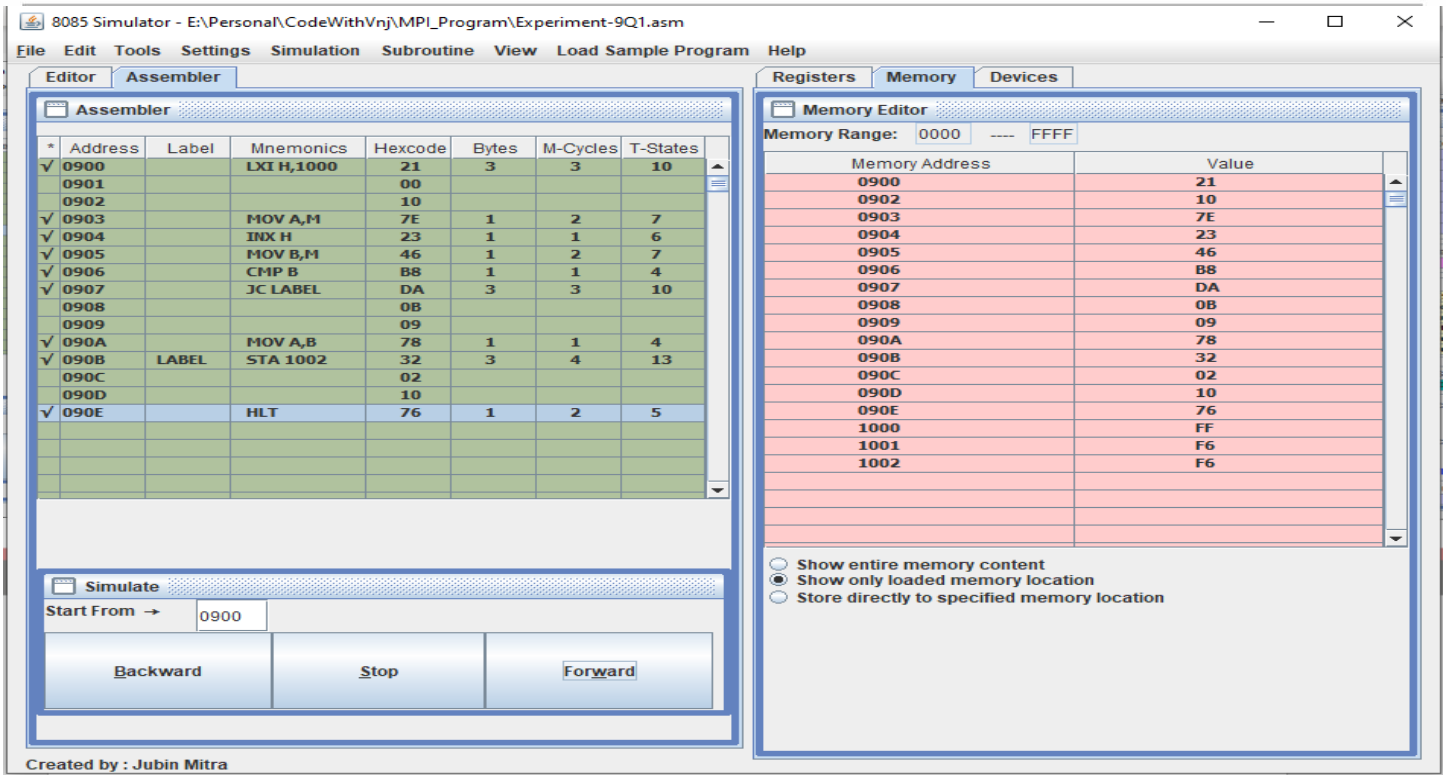
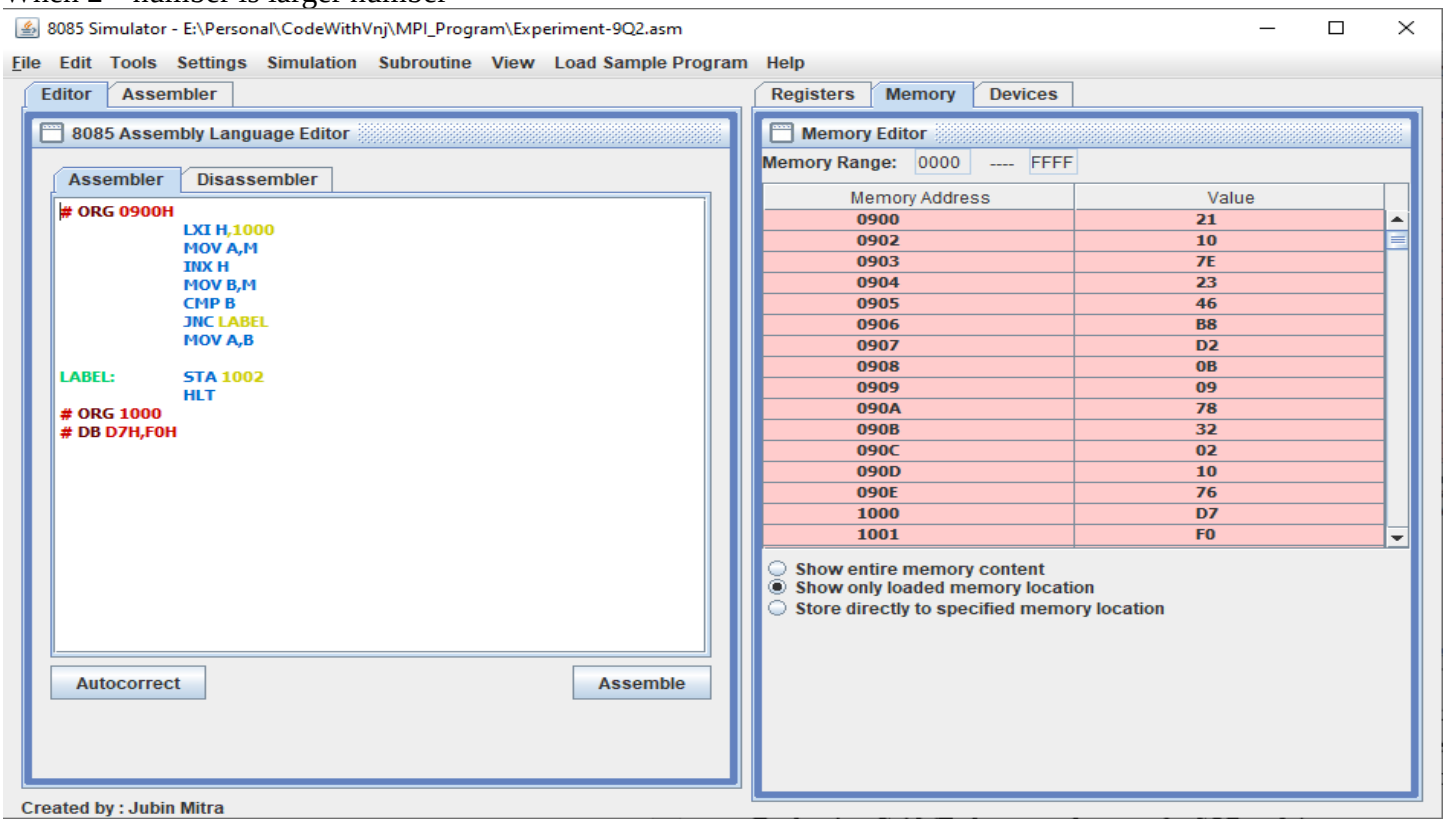
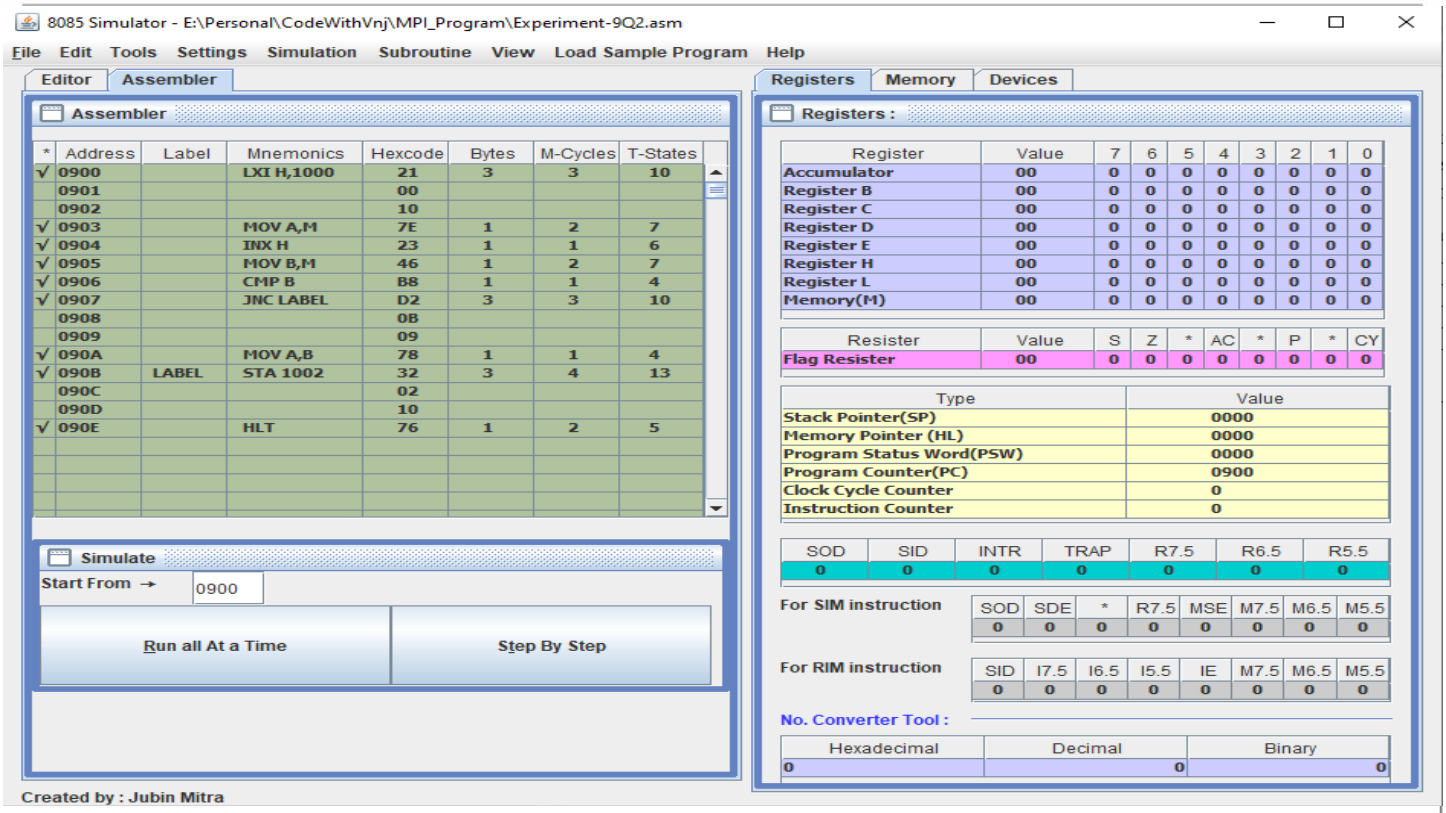


Output to Find the larger out of two numbers:

When 2nd number is larger number





*	Address	Label	Mnemonics	Hexcode	Bytes	M-Cycles	T-States
√	0900		LXI H,1000	21	3	3	10
	0901			00			
	0902			10			
√	0903		MOV A,M	7E	1	2	7
√	0904		INX H	23	1	1	6
√	0905		MOV B,M	46	1	2	7
√	0906		CMP B	B8	1	1	4
√	0907		JNC LABEL	D2	3	3	10
	0908			0B			
	0909			09			
√	090A		MOV A,B	78	1	1	4
√	090B	LABEL	STA 1002	32	3	4	13
	090C			02			
	090D			10			
√	090E		HLT	76	1	2	5

Register	Value	7	6	5	4	3	2	1	0
Accumulator	00	0	0	0	0	0	0	0	0
Register B	00	0	0	0	0	0	0	0	0
Register C	00	0	0	0	0	0	0	0	0
Register D	00	0	0	0	0	0	0	0	0
Register E	00	0	0	0	0	0	0	0	0
Register H	00	0	0	0	0	0	0	0	0
Register L	00	0	0	0	0	0	0	0	0
Memory(M)	00	0	0	0	0	0	0	0	0

Resister	Value	S	Z	*	AC	*	P	*	CY
Flag Resister	00	0	0	0	0	0	0	0	0

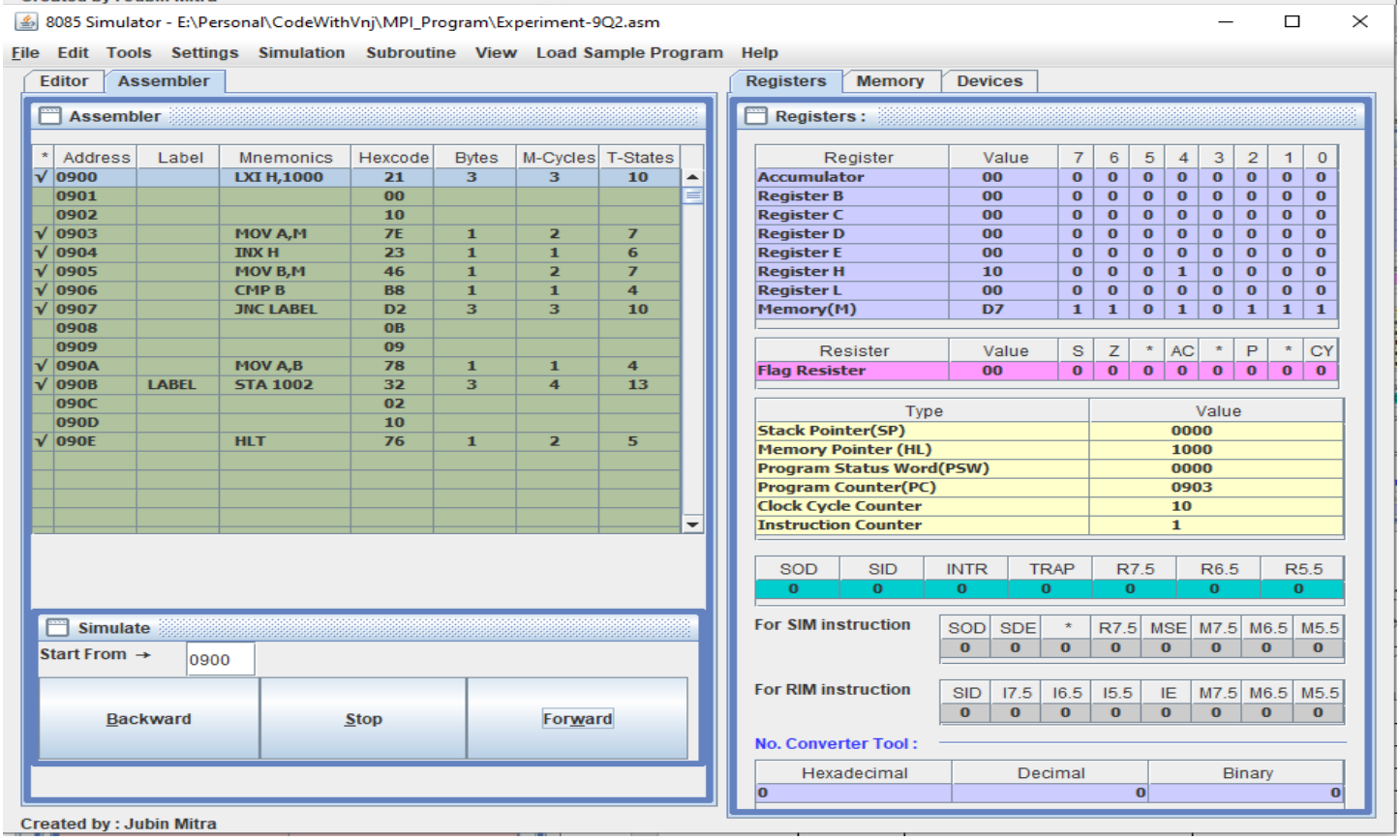
Type	Value
Stack Pointer(SP)	0000
Memory Pointer (HL)	0000
Program Status Word(PSW)	0000
Program Counter(PC)	0900
Clock Cycle Counter	0
Instruction Counter	0

SOD	SID	INTR	TRAP	R7.5	R6.5	R5.5
0	0	0	0	0	0	0

SOD	SDE	*	R7.5	MSE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

SID	I7.5	I6.5	I5.5	IE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

Hexadecimal	Decimal	Binary
0	0	0



*	Address	Label	Mnemonics	Hexcode	Bytes	M-Cycles	T-States
√	0900		LXI H,1000	21	3	3	10
	0901			00			
	0902			10			
√	0903		MOV A,M	7E	1	2	7
√	0904		INX H	23	1	1	6
√	0905		MOV B,M	46	1	2	7
√	0906		CMP B	B8	1	1	4
√	0907		JNC LABEL	D2	3	3	10
	0908			0B			
	0909			09			
√	090A		MOV A,B	78	1	1	4
√	090B	LABEL	STA 1002	32	3	4	13
	090C			02			
	090D			10			
√	090E		HLT	76	1	2	5

Register	Value	7	6	5	4	3	2	1	0
Accumulator	00	0	0	0	0	0	0	0	0
Register B	00	0	0	0	0	0	0	0	0
Register C	00	0	0	0	0	0	0	0	0
Register D	00	0	0	0	0	0	0	0	0
Register E	00	0	0	0	0	0	0	0	0
Register H	10	0	0	0	1	0	0	0	0
Register L	00	0	0	0	0	0	0	0	0
Memory(M)	D7	1	1	0	1	0	1	1	1

Resister	Value	S	Z	*	AC	*	P	*	CY
Flag Resister	00	0	0	0	0	0	0	0	0

Type	Value
Stack Pointer(SP)	0000
Memory Pointer (HL)	1000
Program Status Word(PSW)	0000
Program Counter(PC)	0903
Clock Cycle Counter	10
Instruction Counter	1

SOD	SID	INTR	TRAP	R7.5	R6.5	R5.5
0	0	0	0	0	0	0

SOD	SDE	*	R7.5	MSE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

SID	I7.5	I6.5	I5.5	IE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

Hexadecimal	Decimal	Binary
0	0	0

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*	Address	Label	Mnemonics	Hexcode	Bytes	M-Cycles	T-States
√	0900		LXI H,1000	21	3	3	10
	0901			00			
	0902			10			
√	0903		MOV A,M	7E	1	2	7
√	0904		INX H	23	1	1	6
√	0905		MOV B,M	46	1	2	7
√	0906		CMP B	B8	1	1	4
√	0907		JNC LABEL	D2	3	3	10
	0908			0B			
	0909			09			
√	090A		MOV A,B	78	1	1	4
√	090B	LABEL	STA 1002	32	3	4	13
	090C			02			
	090D			10			
√	090E		HLT	76	1	2	5

Simulate

Start From → 0900

Backward | Stop | Forward

Registers | Memory | Devices

Registers :

Register	Value	7	6	5	4	3	2	1	0
Accumulator	D7	1	1	0	1	0	1	1	1
Register B	00	0	0	0	0	0	0	0	0
Register C	00	0	0	0	0	0	0	0	0
Register D	00	0	0	0	0	0	0	0	0
Register E	00	0	0	0	0	0	0	0	0
Register H	10	0	0	0	1	0	0	0	0
Register L	00	0	0	0	0	0	0	0	0
Memory(M)	D7	1	1	0	1	0	1	1	1

Resister	Value	S	Z	*	AC	*	P	*	CY
Flag Resister	00	0	0	0	0	0	0	0	0

Type	Value
Stack Pointer(SP)	0000
Memory Pointer (HL)	1000
Program Status Word(PSW)	D700
Program Counter(PC)	0904
Clock Cycle Counter	17
Instruction Counter	2

SOD	SID	INTR	TRAP	R7.5	R6.5	R5.5
0	0	0	0	0	0	0

For SIM instruction

SOD	SDE	*	R7.5	MSE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

For RIM instruction

SID	I7.5	I6.5	I5.5	IE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

No. Converter Tool :

Hexadecimal	Decimal	Binary
0	0	0

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Assembler

*	Address	Label	Mnemonics	Hexcode	Bytes	M-Cycles	T-States
√	0900		LXI H,1000	21	3	3	10
	0901			00			
	0902			10			
√	0903		MOV A,M	7E	1	2	7
√	0904		INX H	23	1	1	6
√	0905		MOV B,M	46	1	2	7
√	0906		CMP B	B8	1	1	4
√	0907		JNC LABEL	D2	3	3	10
	0908			0B			
	0909			09			
√	090A		MOV A,B	78	1	1	4
√	090B	LABEL	STA 1002	32	3	4	13
	090C			02			
	090D			10			
√	090E		HLT	76	1	2	5

Simulate

Start From → 0900

Backward | Stop | Forward

Registers | Memory | Devices

Registers :

Register	Value	7	6	5	4	3	2	1	0
Accumulator	D7	1	1	0	1	0	1	1	1
Register B	00	0	0	0	0	0	0	0	0
Register C	00	0	0	0	0	0	0	0	0
Register D	00	0	0	0	0	0	0	0	0
Register E	00	0	0	0	0	0	0	0	0
Register H	10	0	0	0	1	0	0	0	0
Register L	01	0	0	0	0	0	0	0	1
Memory(M)	F0	1	1	1	1	0	0	0	0

Resister	Value	S	Z	*	AC	*	P	*	CY
Flag Resister	00	0	0	0	0	0	0	0	0

Type	Value
Stack Pointer(SP)	0000
Memory Pointer (HL)	1001
Program Status Word(PSW)	D700
Program Counter(PC)	0905
Clock Cycle Counter	23
Instruction Counter	3

SOD	SID	INTR	TRAP	R7.5	R6.5	R5.5
0	0	0	0	0	0	0

For SIM instruction

SOD	SDE	*	R7.5	MSE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

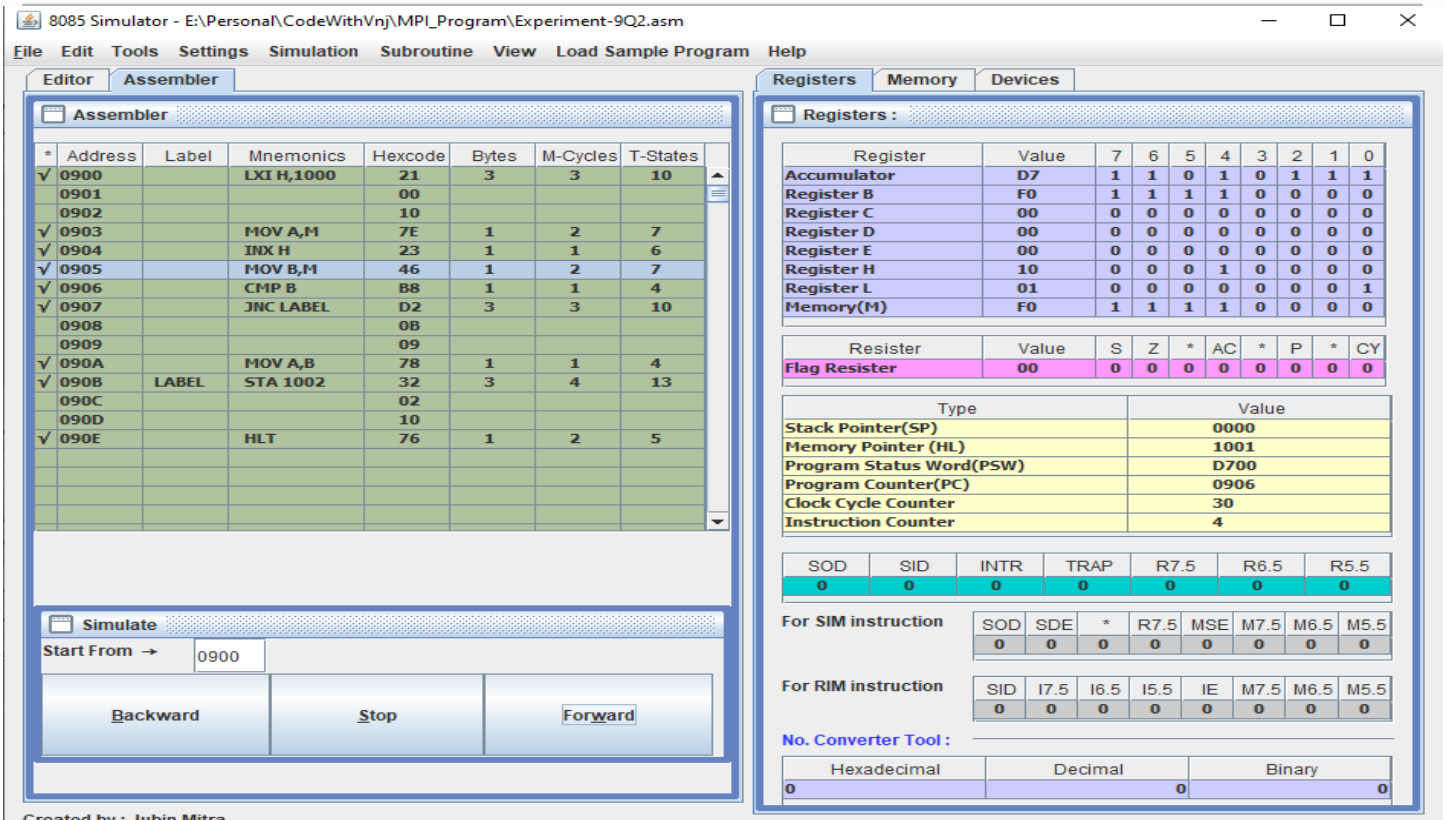
For RIM instruction

SID	I7.5	I6.5	I5.5	IE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

No. Converter Tool :

Hexadecimal	Decimal	Binary
0	0	0

Created by : Jubin Mitra



*	Address	Label	Mnemonics	Hexcode	Bytes	M-Cycles	T-States
√	0900		LXI H,1000	21	3	3	10
	0901			00			
	0902			10			
√	0903		MOV A,M	7E	1	2	7
√	0904		INX H	23	1	1	6
√	0905		MOV B,M	46	1	2	7
√	0906		CMP B	B8	1	1	4
√	0907		JNC LABEL	D2	3	3	10
	0908			0B			
	0909			09			
√	090A		MOV A,B	78	1	1	4
√	090B	LABEL	STA 1002	32	3	4	13
	090C			02			
	090D			10			
√	090E		HLT	76	1	2	5

Register	Value	7	6	5	4	3	2	1	0
Accumulator	D7	1	1	0	1	0	1	1	1
Register B	F0	1	1	1	1	0	0	0	0
Register C	00	0	0	0	0	0	0	0	0
Register D	00	0	0	0	0	0	0	0	0
Register E	00	0	0	0	0	0	0	0	0
Register H	10	0	0	0	1	0	0	0	0
Register L	01	0	0	0	0	0	0	0	1
Memory(M)	F0	1	1	1	1	0	0	0	0

Resister	Value	S	Z	*	AC	*	P	*	CY
Flag Resister	00	0	0	0	0	0	0	0	0

Type	Value
Stack Pointer(SP)	0000
Memory Pointer (HL)	1001
Program Status Word(PSW)	D700
Program Counter(PC)	0906
Clock Cycle Counter	30
Instruction Counter	4

SOD	SID	INTR	TRAP	R7.5	R6.5	R5.5
0	0	0	0	0	0	0

For SIM instruction

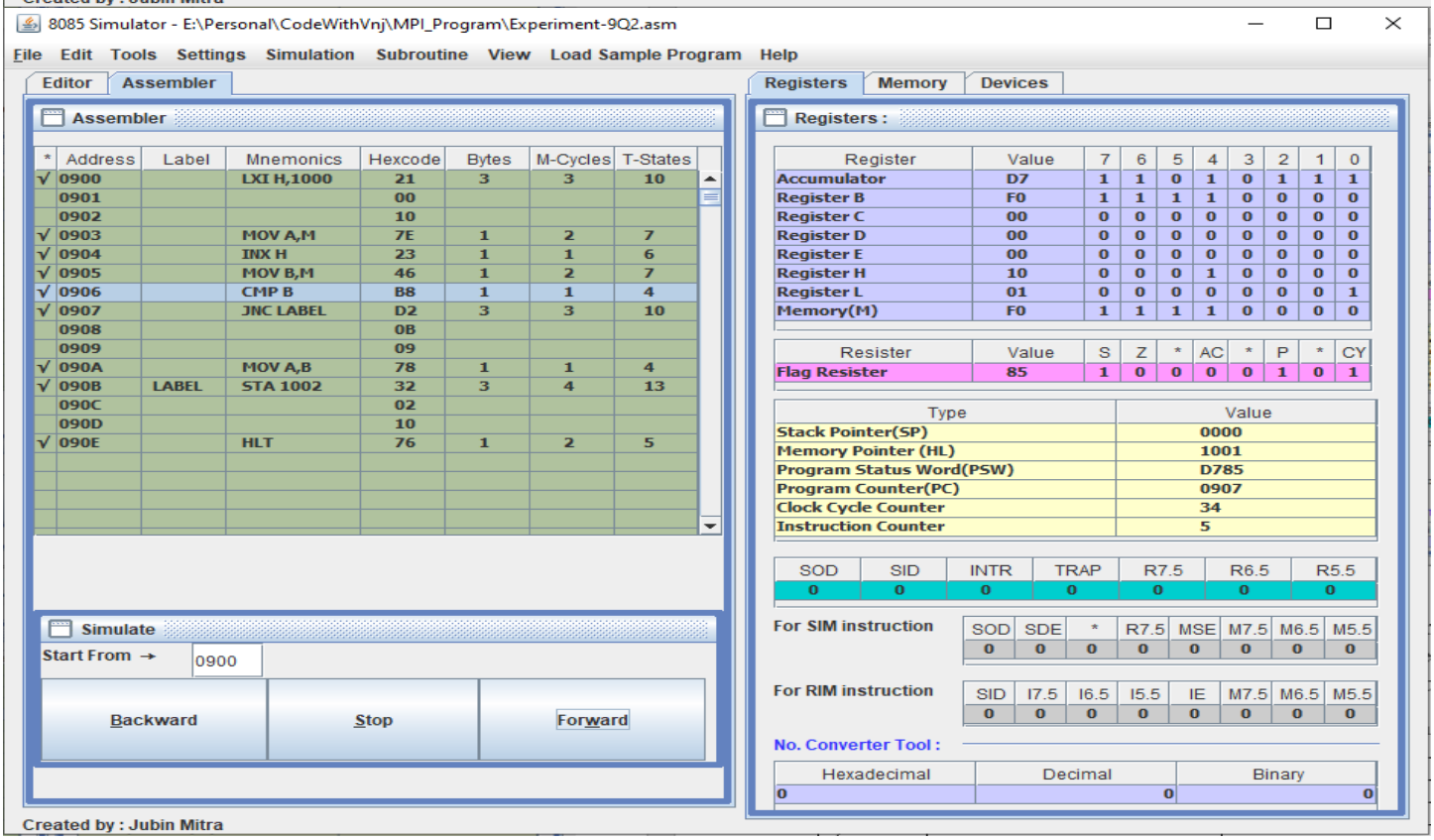
SOD	SDE	*	R7.5	MSE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

For RIM instruction

SID	I7.5	I6.5	I5.5	IE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

No. Converter Tool :

Hexadecimal	Decimal	Binary
0	0	0



*	Address	Label	Mnemonics	Hexcode	Bytes	M-Cycles	T-States
√	0900		LXI H,1000	21	3	3	10
	0901			00			
	0902			10			
√	0903		MOV A,M	7E	1	2	7
√	0904		INX H	23	1	1	6
√	0905		MOV B,M	46	1	2	7
√	0906		CMP B	B8	1	1	4
√	0907		JNC LABEL	D2	3	3	10
	0908			0B			
	0909			09			
√	090A		MOV A,B	78	1	1	4
√	090B	LABEL	STA 1002	32	3	4	13
	090C			02			
	090D			10			
√	090E		HLT	76	1	2	5

Register	Value	7	6	5	4	3	2	1	0
Accumulator	D7	1	1	0	1	0	1	1	1
Register B	F0	1	1	1	1	0	0	0	0
Register C	00	0	0	0	0	0	0	0	0
Register D	00	0	0	0	0	0	0	0	0
Register E	00	0	0	0	0	0	0	0	0
Register H	10	0	0	0	1	0	0	0	0
Register L	01	0	0	0	0	0	0	0	1
Memory(M)	F0	1	1	1	1	0	0	0	0

Resister	Value	S	Z	*	AC	*	P	*	CY
Flag Resister	85	1	0	0	0	0	1	0	1

Type	Value
Stack Pointer(SP)	0000
Memory Pointer (HL)	1001
Program Status Word(PSW)	D785
Program Counter(PC)	0907
Clock Cycle Counter	34
Instruction Counter	5

SOD	SID	INTR	TRAP	R7.5	R6.5	R5.5
0	0	0	0	0	0	0

For SIM instruction

SOD	SDE	*	R7.5	MSE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

For RIM instruction

SID	I7.5	I6.5	I5.5	IE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

No. Converter Tool :

Hexadecimal	Decimal	Binary
0	0	0

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Assembler

*	Address	Label	Mnemonics	Hexcode	Bytes	M-Cycles	T-States
√	0900		LXI H,1000	21	3	3	10
	0901			00			
	0902			10			
√	0903		MOV A,M	7E	1	2	7
√	0904		INX H	23	1	1	6
√	0905		MOV B,M	46	1	2	7
√	0906		CMP B	B8	1	1	4
√	0907		JNC LABEL	D2	3	3	10
	0908			0B			
	0909			09			
√	090A		MOV A,B	78	1	1	4
√	090B	LABEL	STA 1002	32	3	4	13
	090C			02			
	090D			10			
√	090E		HLT	76	1	2	5

Simulate

Start From → 0900

Backward | Stop | Forward

Created by : Jubin Mitra

Registers | Memory | Devices

Registers :

Register	Value	7	6	5	4	3	2	1	0
Accumulator	D7	1	1	0	1	0	1	1	1
Register B	F0	1	1	1	1	0	0	0	0
Register C	00	0	0	0	0	0	0	0	0
Register D	00	0	0	0	0	0	0	0	0
Register E	00	0	0	0	0	0	0	0	0
Register H	10	0	0	0	1	0	0	0	0
Register L	01	0	0	0	0	0	0	0	1
Memory(M)	F0	1	1	1	1	0	0	0	0

Resister	Value	S	Z	*	AC	*	P	*	CY
Flag Resister	85	1	0	0	0	0	1	0	1

Type	Value
Stack Pointer(SP)	0000
Memory Pointer (HL)	1001
Program Status Word(PSW)	D785
Program Counter(PC)	090A
Clock Cycle Counter	41
Instruction Counter	6

SOD	SID	INTR	TRAP	R7.5	R6.5	R5.5
0	0	0	0	0	0	0

For SIM instruction

SOD	SDE	*	R7.5	MSE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

For RIM instruction

SID	I7.5	I6.5	I5.5	IE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

No. Converter Tool :

Hexadecimal	Decimal	Binary
0	0	0

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Assembler

*	Address	Label	Mnemonics	Hexcode	Bytes	M-Cycles	T-States
√	0900		LXI H,1000	21	3	3	10
	0901			00			
	0902			10			
√	0903		MOV A,M	7E	1	2	7
√	0904		INX H	23	1	1	6
√	0905		MOV B,M	46	1	2	7
√	0906		CMP B	B8	1	1	4
√	0907		JNC LABEL	D2	3	3	10
	0908			0B			
	0909			09			
√	090A		MOV A,B	78	1	1	4
√	090B	LABEL	STA 1002	32	3	4	13
	090C			02			
	090D			10			
√	090E		HLT	76	1	2	5

Simulate

Start From → 0900

Backward | Stop | Forward

Created by : Jubin Mitra

Registers | Memory | Devices

Registers :

Register	Value	7	6	5	4	3	2	1	0
Accumulator	F0	1	1	1	1	0	0	0	0
Register B	F0	1	1	1	1	0	0	0	0
Register C	00	0	0	0	0	0	0	0	0
Register D	00	0	0	0	0	0	0	0	0
Register E	00	0	0	0	0	0	0	0	0
Register H	10	0	0	0	1	0	0	0	0
Register L	01	0	0	0	0	0	0	0	1
Memory(M)	F0	1	1	1	1	0	0	0	0

Resister	Value	S	Z	*	AC	*	P	*	CY
Flag Resister	85	1	0	0	0	0	1	0	1

Type	Value
Stack Pointer(SP)	0000
Memory Pointer (HL)	1001
Program Status Word(PSW)	F085
Program Counter(PC)	090B
Clock Cycle Counter	45
Instruction Counter	7

SOD	SID	INTR	TRAP	R7.5	R6.5	R5.5
0	0	0	0	0	0	0

For SIM instruction

SOD	SDE	*	R7.5	MSE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

For RIM instruction

SID	I7.5	I6.5	I5.5	IE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

No. Converter Tool :

Hexadecimal	Decimal	Binary
0	0	0

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*	Address	Label	Mnemonics	Hexcode	Bytes	M-Cycles	T-States
√	0900		LXI H,1000	21	3	3	10
	0901			00			
	0902			10			
√	0903		MOV A,M	7E	1	2	7
√	0904		INX H	23	1	1	6
√	0905		MOV B,M	46	1	2	7
√	0906		CMP B	B8	1	1	4
√	0907		JNC LABEL	D2	3	3	10
	0908			0B			
	0909			09			
√	090A		MOV A,B	78	1	1	4
√	090B	LABEL	STA 1002	32	3	4	13
	090C			02			
	090D			10			
√	090E		HLT	76	1	2	5

Simulate

Start From → 0900

Backward | Stop | Forward

Created by : Jubin Mitra

Registers | Memory | Devices

Registers :

Register	Value	7	6	5	4	3	2	1	0
Accumulator	F0	1	1	1	1	0	0	0	0
Register B	F0	1	1	1	1	0	0	0	0
Register C	00	0	0	0	0	0	0	0	0
Register D	00	0	0	0	0	0	0	0	0
Register E	00	0	0	0	0	0	0	0	0
Register H	10	0	0	0	1	0	0	0	0
Register L	01	0	0	0	0	0	0	0	1
Memory(M)	F0	1	1	1	1	0	0	0	0

Resister	Value	S	Z	*	AC	*	P	*	CY
Flag Resister	85	1	0	0	0	0	1	0	1

Type	Value
Stack Pointer(SP)	0000
Memory Pointer (HL)	1001
Program Status Word(PSW)	F085
Program Counter(PC)	090E
Clock Cycle Counter	58
Instruction Counter	8

SOD	SID	INTR	TRAP	R7.5	R6.5	R5.5
0	0	0	0	0	0	0

For SIM instruction

SOD	SDE	*	R7.5	MSE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

For RIM instruction

SID	I7.5	I6.5	I5.5	IE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

No. Converter Tool :

Hexadecimal	Decimal	Binary
0	0	0

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Assembler

*	Address	Label	Mnemonics	Hexcode	Bytes	M-Cycles	T-States
√	0900		LXI H,1000	21	3	3	10
	0901			00			
	0902			10			
√	0903		MOV A,M	7E	1	2	7
√	0904		INX H	23	1	1	6
√	0905		MOV B,M	46	1	2	7
√	0906		CMP B	B8	1	1	4
√	0907		JNC LABEL	D2	3	3	10
	0908			0B			
	0909			09			
√	090A		MOV A,B	78	1	1	4
√	090B	LABEL	STA 1002	32	3	4	13
	090C			02			
	090D			10			
√	090E		HLT	76	1	2	5

Simulate

Start From → 0900

Backward | Stop | Forward

Created by : Jubin Mitra

Registers | Memory | Devices

Memory Editor

Memory Range: 0000 ---- FFFF

Memory Address	Value
0900	21
0902	10
0903	7E
0904	23
0905	46
0906	B8
0907	D2
0908	0B
0909	09
090A	78
090B	32
090C	02
090D	10
090E	76
1000	D7
1001	F0
1002	F0

- ○ Show entire memory content
- ◉ Show only loaded memory location
- ○ Store directly to specified memory location

When 1st number is larger number

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Editor Assembler | Registers Memory Devices

8085 Assembly Language Editor

Assembler Disassembler

```
# ORG 0900H
        LXI H,1000
        MOV A,M
        INX H
        MOV B,M
        CMP B
        JNC LABEL
        MOV A,B

LABEL:  STA 1002
        HLT
# ORG 1000
# DB FAH,5FH
```

Autocorrect Assemble

Memory Editor

Memory Range: 0000 ---- FFFF

Memory Address	Value
0900	21
0902	10
0903	7E
0904	23
0905	46
0906	B8
0907	D2
0908	0B
0909	09
090A	78
090B	32
090C	02
090D	10
090E	76
1000	FA
1001	5F

Show entire memory content
Show only loaded memory location
Store directly to specified memory location

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8085 Simulator - E:\Personal\CodeWithVnj\MPI_Program\Experiment-9Q2.asm

File Edit Tools Settings Simulation Subroutine View Load Sample Program Help

Editor Assembler | Registers Memory Devices

Assembler

*	Address	Label	Mnemonics	Hexcode	Bytes	M-Cycles	T-States
√	0900		LXI H,1000	21	3	3	10
	0901			00			
	0902			10			
√	0903		MOV A,M	7E	1	2	7
√	0904		INX H	23	1	1	6
√	0905		MOV B,M	46	1	2	7
√	0906		CMP B	B8	1	1	4
√	0907		JNC LABEL	D2	3	3	10
	0908			0B			
	0909			09			
√	090A		MOV A,B	78	1	1	4
√	090B	LABEL	STA 1002	32	3	4	13
	090C			02			
	090D			10			
√	090E		HLT	76	1	2	5

Simulate

Start From → 0900

Run all At a Time | Step By Step

Registers :

Register	Value	7	6	5	4	3	2	1	0
Accumulator	00	0	0	0	0	0	0	0	0
Register B	00	0	0	0	0	0	0	0	0
Register C	00	0	0	0	0	0	0	0	0
Register D	00	0	0	0	0	0	0	0	0
Register E	00	0	0	0	0	0	0	0	0
Register H	00	0	0	0	0	0	0	0	0
Register L	00	0	0	0	0	0	0	0	0
Memory(M)	00	0	0	0	0	0	0	0	0

Resister	Value	S	Z	*	AC	*	P	*	CY
Flag Resister	00	0	0	0	0	0	0	0	0

Type	Value
Stack Pointer(SP)	0000
Memory Pointer (HL)	0000
Program Status Word(PSW)	0000
Program Counter(PC)	0900
Clock Cycle Counter	0
Instruction Counter	0

SOD	SID	INTR	TRAP	R7.5	R6.5	R5.5
0	0	0	0	0	0	0

For SIM instruction

SOD	SDE	*	R7.5	MSE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

For RIM instruction

SID	I7.5	I6.5	I5.5	IE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

No. Converter Tool :

Hexadecimal	Decimal	Binary
0	0	0

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Editor | Assembler

Assembler

*	Address	Label	Mnemonics	Hexcode	Bytes	M-Cycles	T-States
√	0900		LXI H,1000	21	3	3	10
	0901			00			
	0902			10			
√	0903		MOV A,M	7E	1	2	7
√	0904		INX H	23	1	1	6
√	0905		MOV B,M	46	1	2	7
√	0906		CMP B	B8	1	1	4
√	0907		JNC LABEL	D2	3	3	10
	0908			0B			
	0909			09			
√	090A		MOV A,B	78	1	1	4
√	090B	LABEL	STA 1002	32	3	4	13
	090C			02			
	090D			10			
√	090E		HLT	76	1	2	5

Simulate

Start From → 0900

Backward | Stop | Forward

Created by : Jubin Mitra

Registers | Memory | Devices

Registers :

Register	Value	7	6	5	4	3	2	1	0
Accumulator	00	0	0	0	0	0	0	0	0
Register B	00	0	0	0	0	0	0	0	0
Register C	00	0	0	0	0	0	0	0	0
Register D	00	0	0	0	0	0	0	0	0
Register E	00	0	0	0	0	0	0	0	0
Register H	10	0	0	0	1	0	0	0	0
Register L	00	0	0	0	0	0	0	0	0
Memory(M)	FA	1	1	1	1	1	0	1	0

Resister	Value	S	Z	*	AC	*	P	*	CY
Flag Resister	00	0	0	0	0	0	0	0	0

Type	Value
Stack Pointer(SP)	0000
Memory Pointer (HL)	1000
Program Status Word(PSW)	0000
Program Counter(PC)	0903
Clock Cycle Counter	10
Instruction Counter	1

SOD	SID	INTR	TRAP	R7.5	R6.5	R5.5
0	0	0	0	0	0	0

For SIM instruction

SOD	SDE	*	R7.5	MSE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

For RIM instruction

SID	I7.5	I6.5	I5.5	IE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

No. Converter Tool :

Hexadecimal	Decimal	Binary
0	0	0

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File Edit Tools Settings Simulation Subroutine View Load Sample Program Help

Editor | Assembler

Assembler

*	Address	Label	Mnemonics	Hexcode	Bytes	M-Cycles	T-States
√	0900		LXI H,1000	21	3	3	10
	0901			00			
	0902			10			
√	0903		MOV A,M	7E	1	2	7
√	0904		INX H	23	1	1	6
√	0905		MOV B,M	46	1	2	7
√	0906		CMP B	B8	1	1	4
√	0907		JNC LABEL	D2	3	3	10
	0908			0B			
	0909			09			
√	090A		MOV A,B	78	1	1	4
√	090B	LABEL	STA 1002	32	3	4	13
	090C			02			
	090D			10			
√	090E		HLT	76	1	2	5

Simulate

Start From → 0900

Backward | Stop | Forward

Created by : Jubin Mitra

Registers | Memory | Devices

Registers :

Register	Value	7	6	5	4	3	2	1	0
Accumulator	FA	1	1	1	1	1	0	1	0
Register B	00	0	0	0	0	0	0	0	0
Register C	00	0	0	0	0	0	0	0	0
Register D	00	0	0	0	0	0	0	0	0
Register E	00	0	0	0	0	0	0	0	0
Register H	10	0	0	0	1	0	0	0	0
Register L	00	0	0	0	0	0	0	0	0
Memory(M)	FA	1	1	1	1	1	0	1	0

Resister	Value	S	Z	*	AC	*	P	*	CY
Flag Resister	00	0	0	0	0	0	0	0	0

Type	Value
Stack Pointer(SP)	0000
Memory Pointer (HL)	1000
Program Status Word(PSW)	FA00
Program Counter(PC)	0904
Clock Cycle Counter	17
Instruction Counter	2

SOD	SID	INTR	TRAP	R7.5	R6.5	R5.5
0	0	0	0	0	0	0

For SIM instruction

SOD	SDE	*	R7.5	MSE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

For RIM instruction

SID	I7.5	I6.5	I5.5	IE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

No. Converter Tool :

Hexadecimal	Decimal	Binary
0	0	0

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Editor | Assembler

Assembler

*	Address	Label	Mnemonics	Hexcode	Bytes	M-Cycles	T-States
√	0900		LXI H,1000	21	3	3	10
	0901			00			
	0902			10			
√	0903		MOV A,M	7E	1	2	7
√	0904		INX H	23	1	1	6
√	0905		MOV B,M	46	1	2	7
√	0906		CMP B	B8	1	1	4
√	0907		JNC LABEL	D2	3	3	10
	0908			0B			
	0909			09			
√	090A		MOV A,B	78	1	1	4
√	090B	LABEL	STA 1002	32	3	4	13
	090C			02			
	090D			10			
√	090E		HLT	76	1	2	5

Simulate

Start From → 0900

Backward | Stop | Forward

Registers | Memory | Devices

Registers :

Register	Value	7	6	5	4	3	2	1	0
Accumulator	FA	1	1	1	1	1	0	1	0
Register B	00	0	0	0	0	0	0	0	0
Register C	00	0	0	0	0	0	0	0	0
Register D	00	0	0	0	0	0	0	0	0
Register E	00	0	0	0	0	0	0	0	0
Register H	10	0	0	0	1	0	0	0	0
Register L	01	0	0	0	0	0	0	0	1
Memory(M)	5F	0	1	0	1	1	1	1	1

Resister	Value	S	Z	*	AC	*	P	*	CY
Flag Resister	00	0	0	0	0	0	0	0	0

Type	Value
Stack Pointer(SP)	0000
Memory Pointer (HL)	1001
Program Status Word(PSW)	FA00
Program Counter(PC)	0905
Clock Cycle Counter	23
Instruction Counter	3

SOD	SID	INTR	TRAP	R7.5	R6.5	R5.5
0	0	0	0	0	0	0

For SIM instruction

SOD	SDE	*	R7.5	MSE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

For RIM instruction

SID	I7.5	I6.5	I5.5	IE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

No. Converter Tool :

Hexadecimal	Decimal	Binary
0	0	0

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Assembler

*	Address	Label	Mnemonics	Hexcode	Bytes	M-Cycles	T-States
√	0900		LXI H,1000	21	3	3	10
	0901			00			
	0902			10			
√	0903		MOV A,M	7E	1	2	7
√	0904		INX H	23	1	1	6
√	0905		MOV B,M	46	1	2	7
√	0906		CMP B	B8	1	1	4
√	0907		JNC LABEL	D2	3	3	10
	0908			0B			
	0909			09			
√	090A		MOV A,B	78	1	1	4
√	090B	LABEL	STA 1002	32	3	4	13
	090C			02			
	090D			10			
√	090E		HLT	76	1	2	5

Simulate

Start From → 0900

Backward | Stop | Forward

Registers | Memory | Devices

Registers :

Register	Value	7	6	5	4	3	2	1	0
Accumulator	FA	1	1	1	1	1	0	1	0
Register B	5F	0	1	0	1	1	1	1	1
Register C	00	0	0	0	0	0	0	0	0
Register D	00	0	0	0	0	0	0	0	0
Register E	00	0	0	0	0	0	0	0	0
Register H	10	0	0	0	1	0	0	0	0
Register L	01	0	0	0	0	0	0	0	1
Memory(M)	5F	0	1	0	1	1	1	1	1

Resister	Value	S	Z	*	AC	*	P	*	CY
Flag Resister	00	0	0	0	0	0	0	0	0

Type	Value
Stack Pointer(SP)	0000
Memory Pointer (HL)	1001
Program Status Word(PSW)	FA00
Program Counter(PC)	0906
Clock Cycle Counter	30
Instruction Counter	4

SOD	SID	INTR	TRAP	R7.5	R6.5	R5.5
0	0	0	0	0	0	0

For SIM instruction

SOD	SDE	*	R7.5	MSE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

For RIM instruction

SID	I7.5	I6.5	I5.5	IE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

No. Converter Tool :

Hexadecimal	Decimal	Binary
0	0	0

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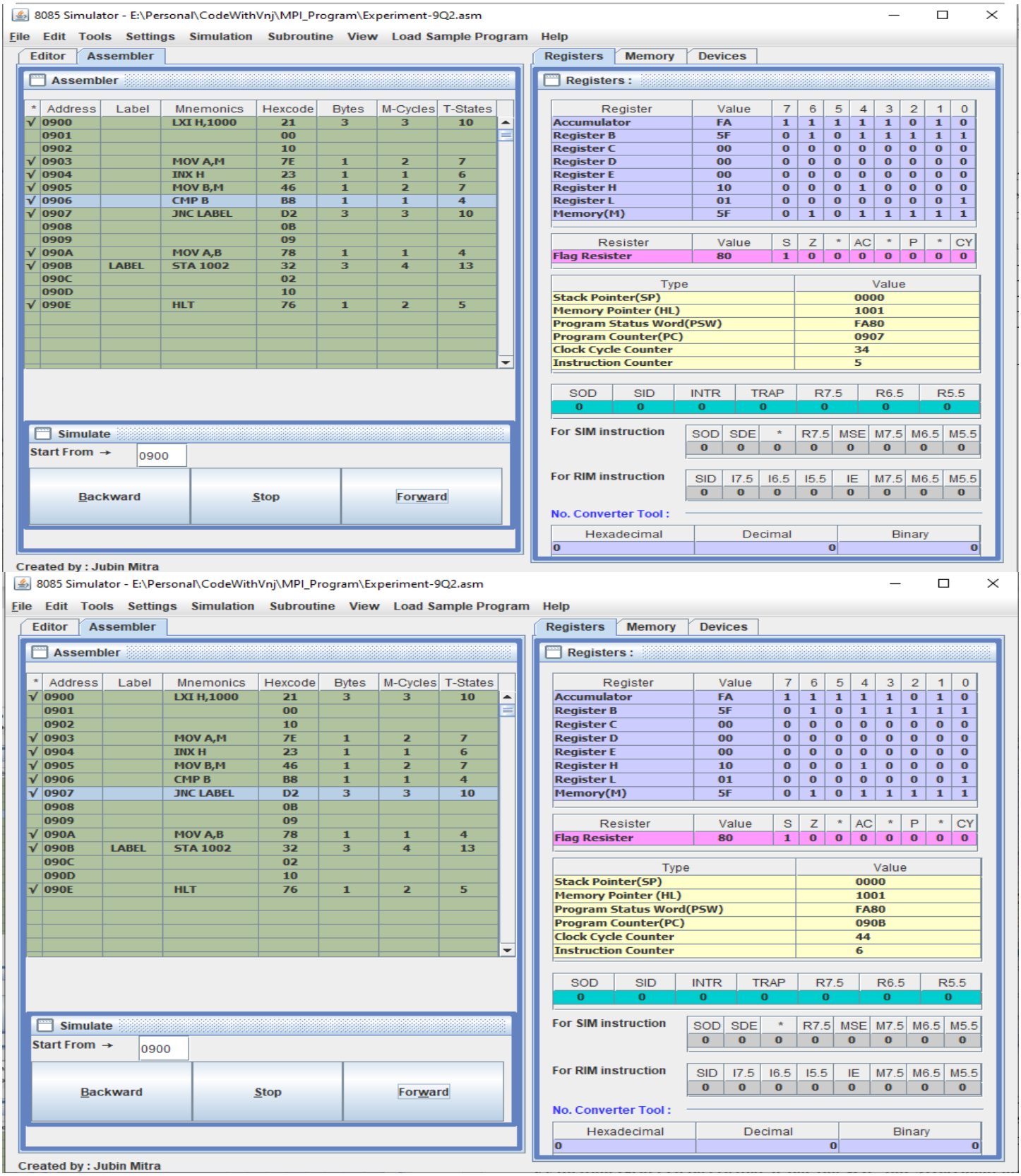

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Editor | Assembler

Assembler

*	Address	Label	Mnemonics	Hexcode	Bytes	M-Cycles	T-States
√	0900		LXI H,1000	21	3	3	10
	0901			00			
	0902			10			
√	0903		MOV A,M	7E	1	2	7
√	0904		INX H	23	1	1	6
√	0905		MOV B,M	46	1	2	7
√	0906		CMP B	B8	1	1	4
√	0907		JNC LABEL	D2	3	3	10
	0908			0B			
	0909			09			
√	090A		MOV A,B	78	1	1	4
√	090B	LABEL	STA 1002	32	3	4	13
	090C			02			
	090D			10			
√	090E		HLT	76	1	2	5

Simulate

Start From → 0900

Backward | Stop | Forward

Created by : Jubin Mitra

Registers | Memory | Devices

Registers :

Register	Value	7	6	5	4	3	2	1	0
Accumulator	FA	1	1	1	1	1	0	1	0
Register B	5F	0	1	0	1	1	1	1	1
Register C	00	0	0	0	0	0	0	0	0
Register D	00	0	0	0	0	0	0	0	0
Register E	00	0	0	0	0	0	0	0	0
Register H	10	0	0	0	1	0	0	0	0
Register L	01	0	0	0	0	0	0	0	1
Memory(M)	5F	0	1	0	1	1	1	1	1

Resister	Value	S	Z	*	AC	*	P	*	CY
Flag Resister	80	1	0	0	0	0	0	0	0

Type	Value
Stack Pointer(SP)	0000
Memory Pointer (HL)	1001
Program Status Word(PSW)	FA80
Program Counter(PC)	0907
Clock Cycle Counter	34
Instruction Counter	5

SOD	SID	INTR	TRAP	R7.5	R6.5	R5.5
0	0	0	0	0	0	0

For SIM instruction

SOD	SDE	*	R7.5	MSE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

For RIM instruction

SID	I7.5	I6.5	I5.5	IE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

No. Converter Tool :

Hexadecimal	Decimal	Binary
0	0	0

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Assembler

*	Address	Label	Mnemonics	Hexcode	Bytes	M-Cycles	T-States
√	0900		LXI H,1000	21	3	3	10
	0901			00			
	0902			10			
√	0903		MOV A,M	7E	1	2	7
√	0904		INX H	23	1	1	6
√	0905		MOV B,M	46	1	2	7
√	0906		CMP B	B8	1	1	4
√	0907		JNC LABEL	D2	3	3	10
	0908			0B			
	0909			09			
√	090A		MOV A,B	78	1	1	4
√	090B	LABEL	STA 1002	32	3	4	13
	090C			02			
	090D			10			
√	090E		HLT	76	1	2	5

Simulate

Start From → 0900

Backward | Stop | Forward

Created by : Jubin Mitra

Registers | Memory | Devices

Registers :

Register	Value	7	6	5	4	3	2	1	0
Accumulator	FA	1	1	1	1	1	0	1	0
Register B	5F	0	1	0	1	1	1	1	1
Register C	00	0	0	0	0	0	0	0	0
Register D	00	0	0	0	0	0	0	0	0
Register E	00	0	0	0	0	0	0	0	0
Register H	10	0	0	0	1	0	0	0	0
Register L	01	0	0	0	0	0	0	0	1
Memory(M)	5F	0	1	0	1	1	1	1	1

Resister	Value	S	Z	*	AC	*	P	*	CY
Flag Resister	80	1	0	0	0	0	0	0	0

Type	Value
Stack Pointer(SP)	0000
Memory Pointer (HL)	1001
Program Status Word(PSW)	FA80
Program Counter(PC)	090B
Clock Cycle Counter	44
Instruction Counter	6

SOD	SID	INTR	TRAP	R7.5	R6.5	R5.5
0	0	0	0	0	0	0

For SIM instruction

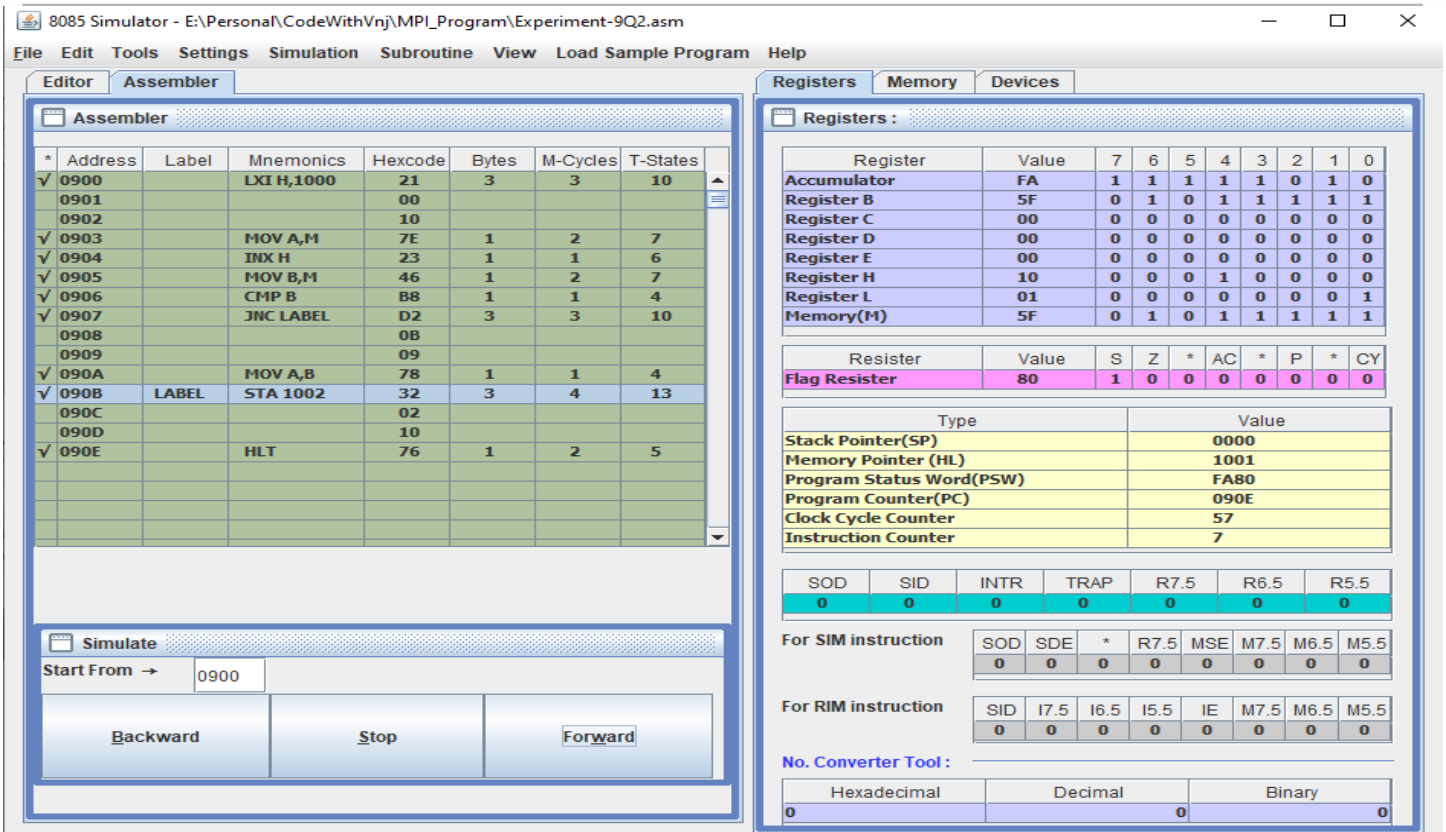
SOD	SDE	*	R7.5	MSE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

For RIM instruction

SID	I7.5	I6.5	I5.5	IE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

No. Converter Tool :

Hexadecimal	Decimal	Binary
0	0	0



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Assembler

*	Address	Label	Mnemonics	Hexcode	Bytes	M-Cycles	T-States
√	0900		LXI H,1000	21	3	3	10
	0901			00			
	0902			10			
√	0903		MOV A,M	7E	1	2	7
√	0904		INX H	23	1	1	6
√	0905		MOV B,M	46	1	2	7
√	0906		CMP B	B8	1	1	4
√	0907		JNC LABEL	D2	3	3	10
	0908			0B			
	0909			09			
√	090A		MOV A,B	78	1	1	4
√	090B	LABEL	STA 1002	32	3	4	13
	090C			02			
	090D			10			
√	090E		HLT	76	1	2	5

Simulate

Start From → 0900

Backward | Stop | Forward

Created by : Jubin Mitra

Registers | Memory | Devices

Registers :

Register	Value	7	6	5	4	3	2	1	0
Accumulator	FA	1	1	1	1	1	0	1	0
Register B	5F	0	1	0	1	1	1	1	1
Register C	00	0	0	0	0	0	0	0	0
Register D	00	0	0	0	0	0	0	0	0
Register E	00	0	0	0	0	0	0	0	0
Register H	10	0	0	0	1	0	0	0	0
Register L	01	0	0	0	0	0	0	0	1
Memory(M)	5F	0	1	0	1	1	1	1	1

Resister	Value	S	Z	*	AC	*	P	*	CY
Flag Resister	80	1	0	0	0	0	0	0	0

Type	Value
Stack Pointer(SP)	0000
Memory Pointer (HL)	1001
Program Status Word(PSW)	FA80
Program Counter(PC)	090E
Clock Cycle Counter	57
Instruction Counter	7

SOD	SID	INTR	TRAP	R7.5	R6.5	R5.5
0	0	0	0	0	0	0

For SIM instruction

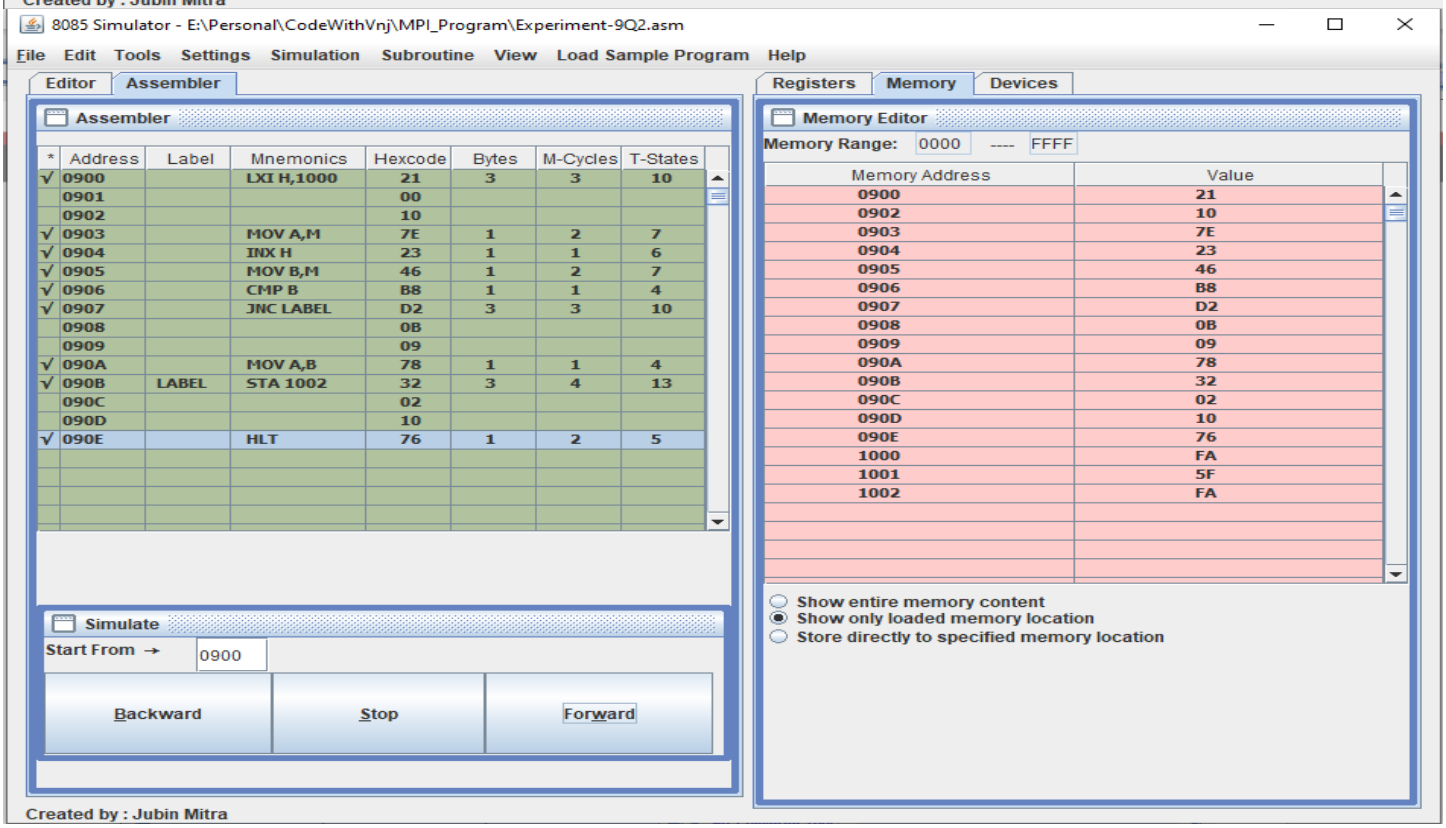
SOD	SDE	*	R7.5	MSE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

For RIM instruction

SID	I7.5	I6.5	I5.5	IE	M7.5	M6.5	M5.5
0	0	0	0	0	0	0	0

No. Converter Tool :

Hexadecimal	Decimal	Binary
0	0	0



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Assembler

*	Address	Label	Mnemonics	Hexcode	Bytes	M-Cycles	T-States
√	0900		LXI H,1000	21	3	3	10
	0901			00			
	0902			10			
√	0903		MOV A,M	7E	1	2	7
√	0904		INX H	23	1	1	6
√	0905		MOV B,M	46	1	2	7
√	0906		CMP B	B8	1	1	4
√	0907		JNC LABEL	D2	3	3	10
	0908			0B			
	0909			09			
√	090A		MOV A,B	78	1	1	4
√	090B	LABEL	STA 1002	32	3	4	13
	090C			02			
	090D			10			
√	090E		HLT	76	1	2	5

Simulate

Start From → 0900

Backward | Stop | Forward

Created by : Jubin Mitra

Registers | Memory | Devices

Memory Editor

Memory Range: 0000 ---- FFFF

Memory Address	Value
0900	21
0902	10
0903	7E
0904	23
0905	46
0906	B8
0907	D2
0908	0B
0909	09
090A	78
090B	32
090C	02
090D	10
090E	76
1000	FA
1001	5F
1002	FA

- ○ Show entire memory content
- ◉ Show only loaded memory location
- ○ Store directly to specified memory location

Learning outcomes (What I have learnt):

1. Learnt to find larger number in two number.
2. Learnt to find smaller number in two number.

Evaluation Grid (To be created as per the SOP and Assessment guidelines by the faculty):

Sr. No.	Parameters	Marks Obtained	Maximum Marks
1.			
2.			
3.			