Experiment-09

Student Name: **UID:**
Branch: B.E.CSE **Section/Group:**
Semester: 4th **Date of Performance:**23/04/2022
Subject Name: MPI Lab **Subject Code:**20CSP253

1. Aim/Overview of the practical:

a)Find the smaller out of two numbers.

b) Find the larger out of two numbers.

2. Task to be done:

a)Find the smaller out of two numbers.

b) Find the larger out of two numbers.

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

Jubin , Java

4. Description/ Code:

a)Find the smaller out of two numbers.

```
        #BEGIN 0000H
LXI H,3000H
MOV A,M
INX H
MOV B,M
CMP B
JC 200BH
MOV A,B
INX H
MOV M,A
HLT

#ORG 3000H
#DB 24H,16H
```

b) Find the larger out of two numbers.

```
#BEGIN 0000H
LXI H,3000H
MOV A,M
```

INX H

MOV B,M

CMP B

JNC 200BH

MOV A,B

INX H

MOV M,A

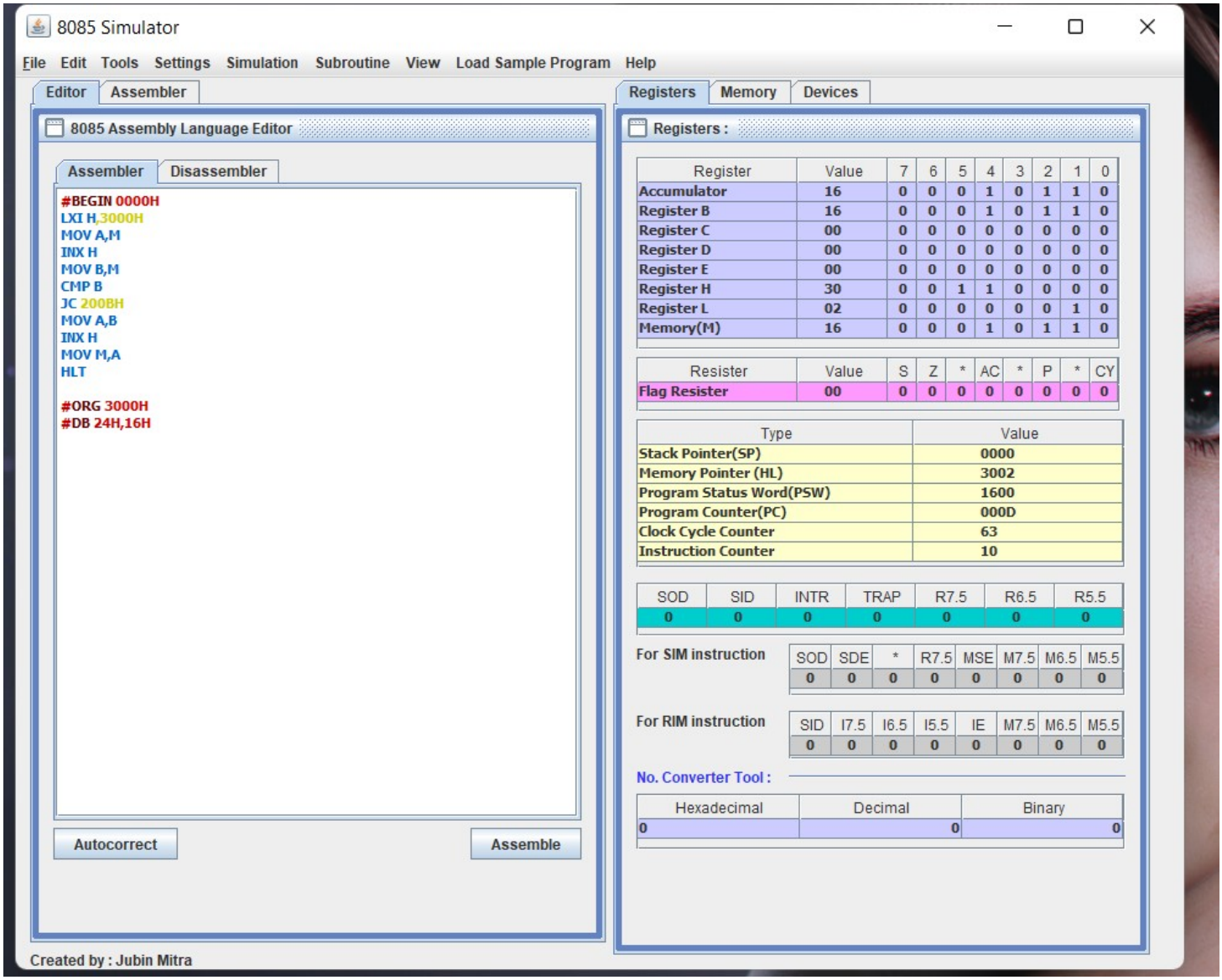
HLT

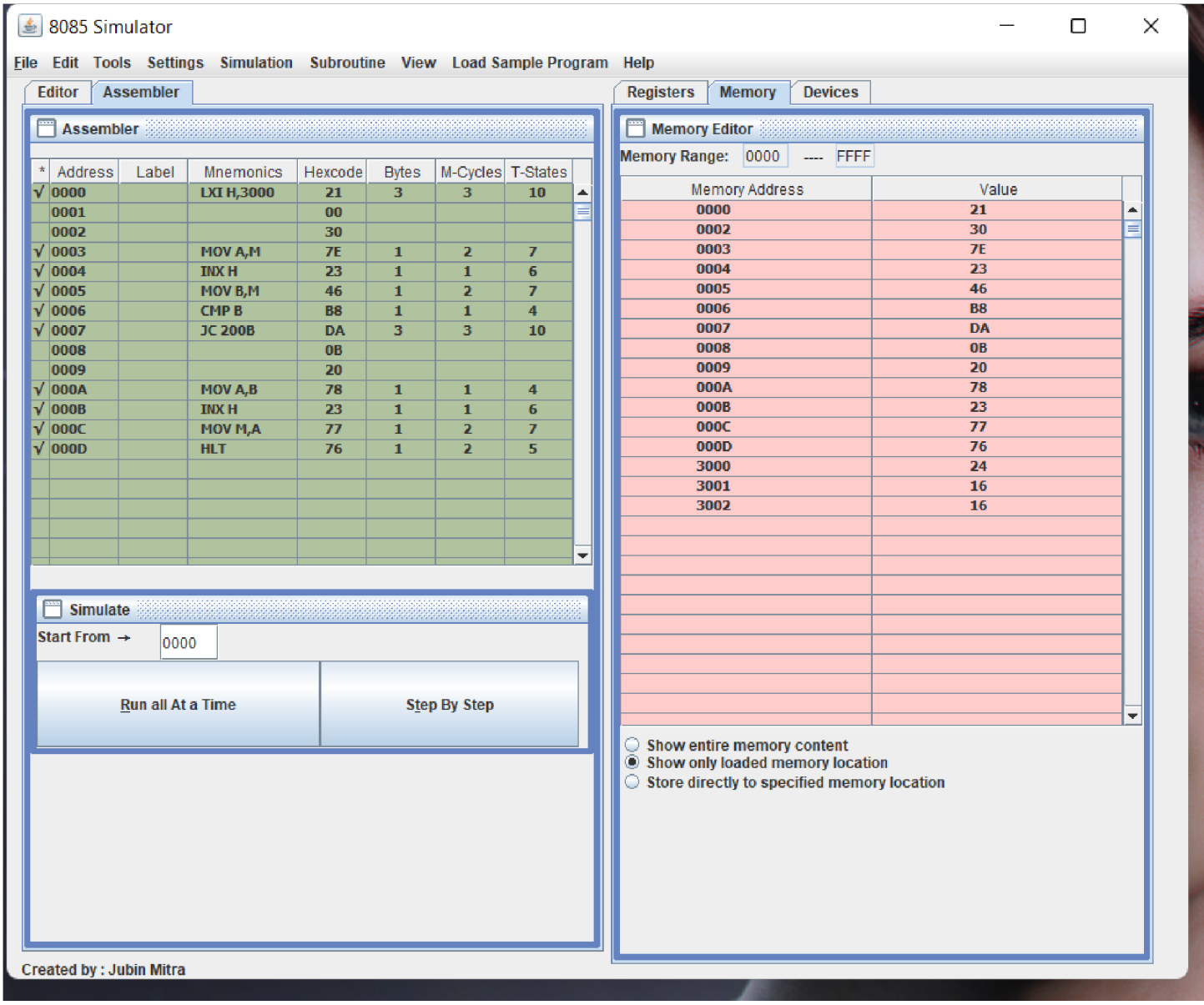
#ORG 3000H #DB

14H,18H

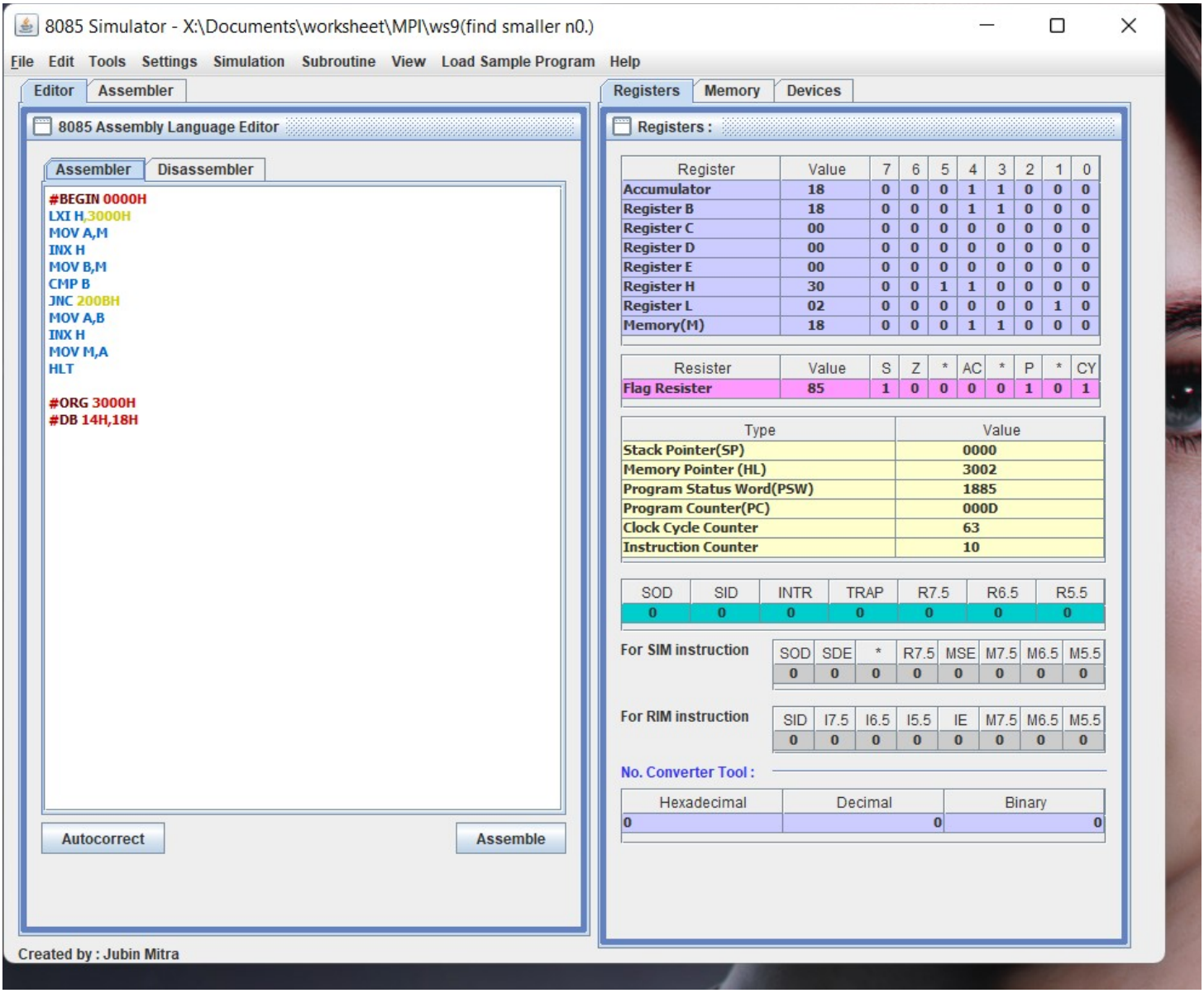
5. Result/Output/Writing Summary:

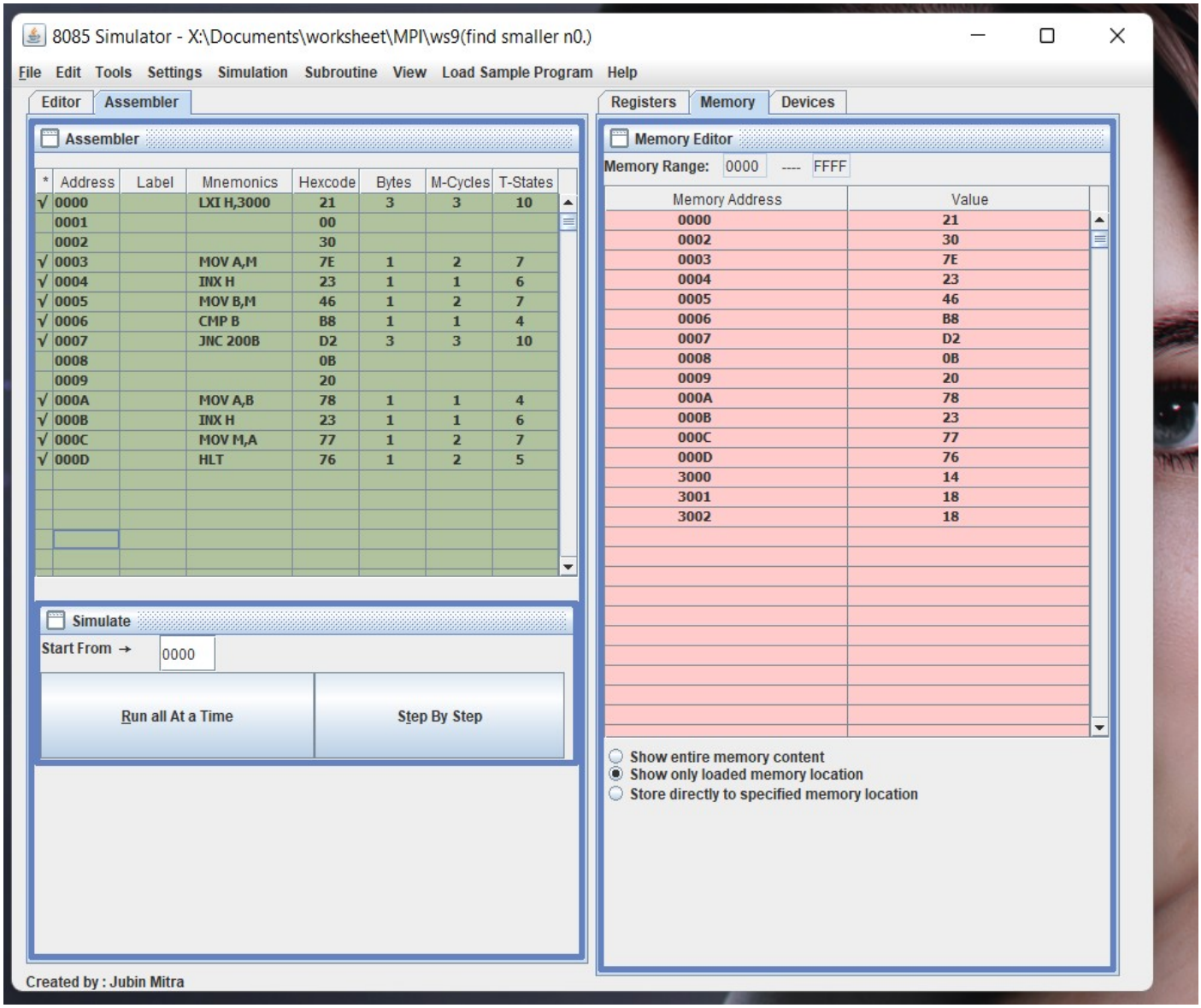
a)Find the smaller out of two numbers.


8085 Simulator
File Edit Tools Settings Simulation Subroutine View Load Sample Program Help
Editor Assembler
8085 Assembly Language Editor
Assembler Disassembler
#BEGIN 0000H
LXI H,3000H
MOV A,M
INX H
MOV B,M
CMP B
JC 200BH
MOV A,B
INX H
MOV M,A
HLT
#ORG 3000H
#DB 24H,16H
Autocorrect
Assemble
Registers Memory Devices
Registers :
Register | Value | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0
Accumulator | 16 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0
Register B | 16 | 0 | 0 | 0 | 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 | 30 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0
Register L | 02 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0
Memory(M) | 16 | 0 | 0 | 0 | 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) | 3002
Program Status Word(PSW) | 1600
Program Counter(PC) | 000D
Clock Cycle Counter | 63
Instruction Counter | 10
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



b) Find the larger out of two numbers.


8085 Simulator - X:\Documents\worksheet\MPI\ws9(find smaller n0.)
File Edit Tools Settings Simulation Subroutine View Load Sample Program Help
Editor Assembler
8085 Assembly Language Editor
Assembler Disassembler
#BEGIN 0000H
LXI H,3000H
MOV A,M
INX H
MOV B,M
CMP B
JNC 200BH
MOV A,B
INX H
MOV M,A
HLT
#ORG 3000H
#DB 14H,18H
Autocorrect
Assemble
Registers Memory Devices
Registers :
Register | Value | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0
Accumulator | 18 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0
Register B | 18 | 0 | 0 | 0 | 1 | 1 | 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 | 30 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0
Register L | 02 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0
Memory(M) | 18 | 0 | 0 | 0 | 1 | 1 | 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) | 3002
Program Status Word(PSW) | 1885
Program Counter(PC) | 000D
Clock Cycle Counter | 63
Instruction Counter | 10
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



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.			