LAB 1: INTRODUCTION TO 8085 SIMULATOR

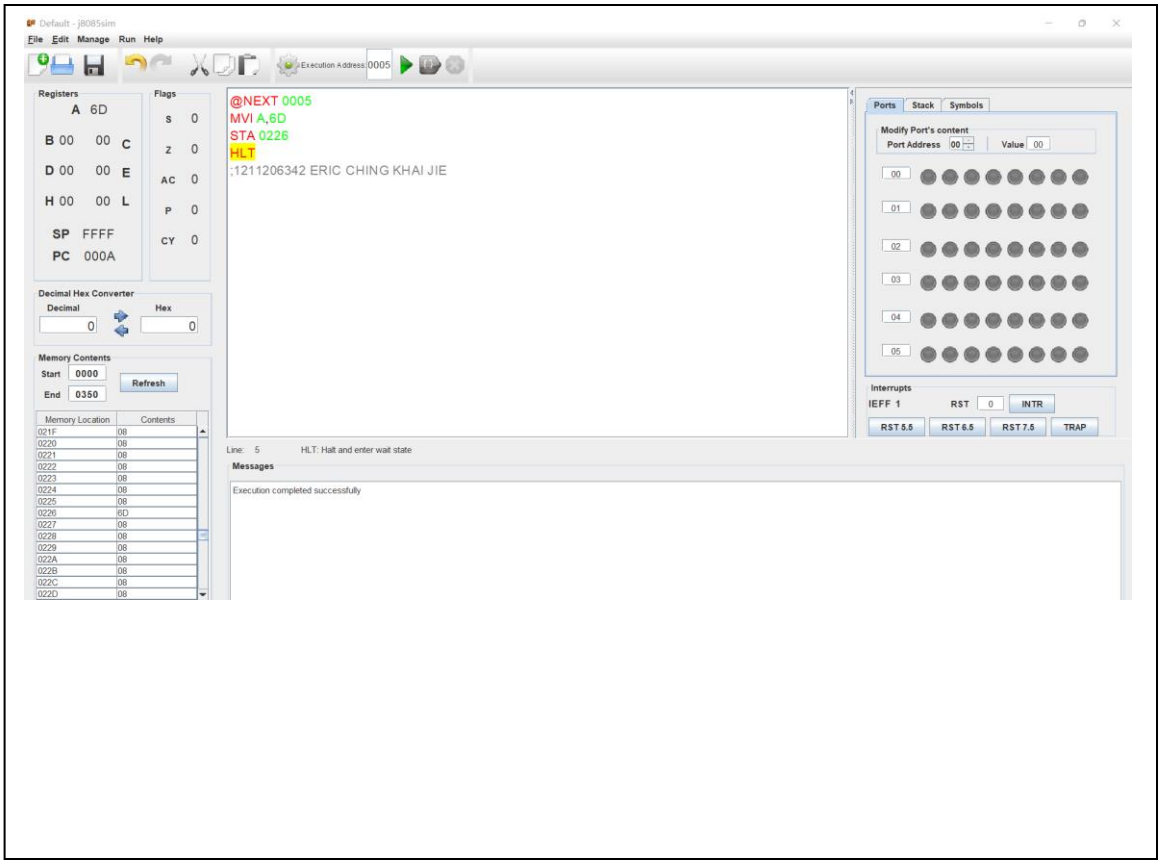
SUBMISSION QUESTIONS

1. Store the data byte **6D**H into memory location **0226**H. Set the next memory address to 0005H (Set the address of memory contents from 0000H to 0350H).

[2 Marks]

SOLUTION	
@NEXT 0005	**//The next memory address**
MVI A,6D	//Load Register AC with 6DH
STA 0226	//Store the AC content to memory location 0226H
HLT	//Terminate program execution

Paste the screenshot of your 8085 Simulator.

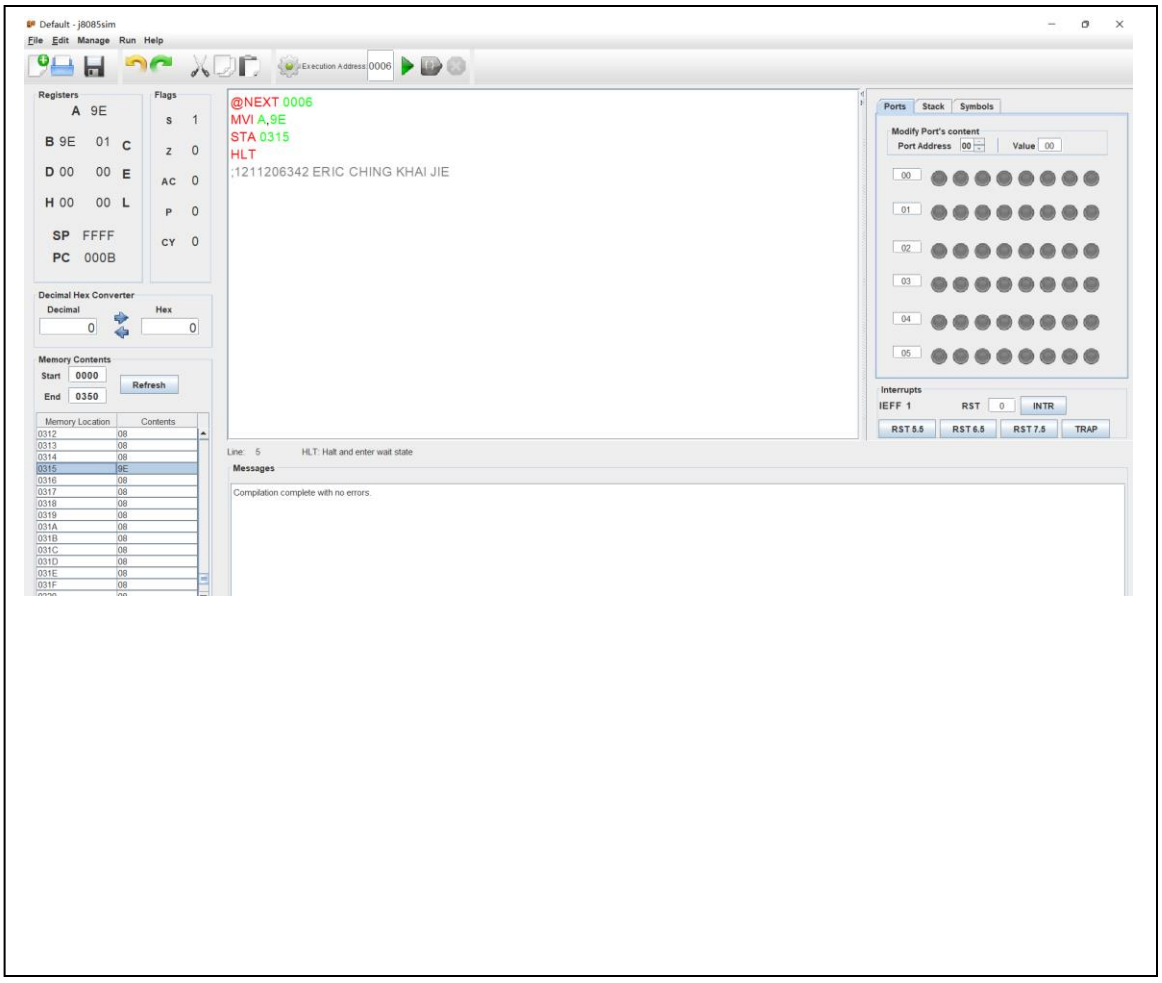


2. Store the data byte **9E**H into memory location **0315**H. Set the next memory address to 0006H (Set the address of memory contents from 0000H to 0350H).

[2 Marks]

SOLUTION	
@NEXT 0006	**//The next memory address**
MVI A,9E	//Load Register AC with 9EH
STA 0315	//Store the AC content to memory location 0315H
HLT	//Terminate program execution

Paste the screenshot of your 8085 Simulator.

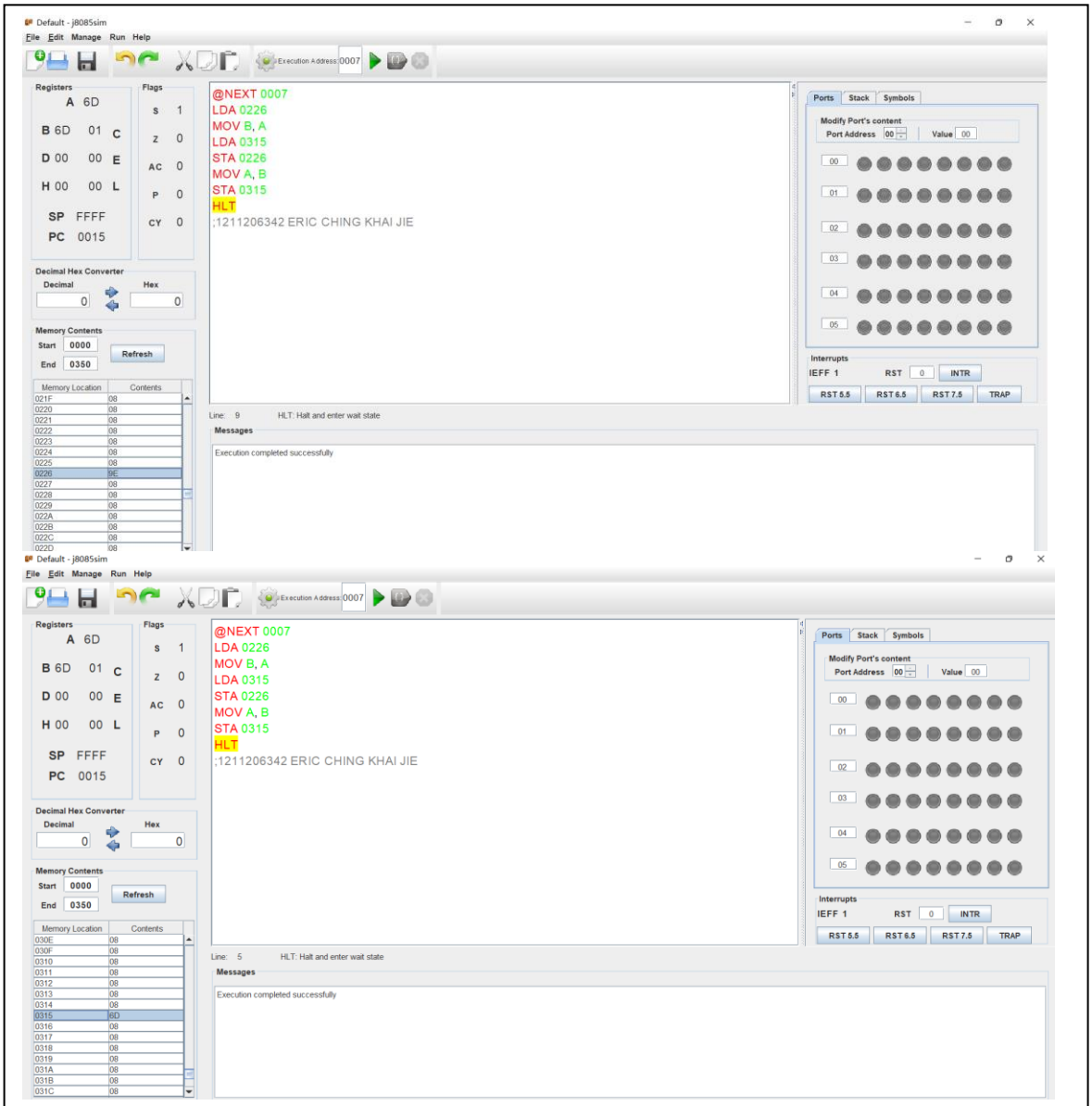


3. Exchange the contents between memory locations **0226**H and **0315**H. Set the next memory address to 0007H (Set the address of memory contents from 0000H to 0350H).
[6 Marks]

SOLUTION	
@NEXT 0007	//The next memory address
LDA 0226	//Load data from memory location 0226H to AC
MOV B, A	//Copy the content in AC to register B
LDA 0315	//Load data from memory location 0315H to AC
STA 0226	//Store the AC content to memory location 0226H
MOV A, B	//Copy the content in register B to AC
STA 0315	//Store the AC content to memory location 0315H
HLT	//Terminate program execution

//Load data from

Paste the screenshot of your 8085 Simulator.


Default - j8085sim
File Edit Manage Run Help
Execution Address 0007
Registers
A 6D
B 6D 01 C
D 00 00 E
H 00 00 L
SP FFFF
PC 0015
Flags
S 1
Z 0
AC 0
P 0
CY 0
Decimal Hex Converter
Decimal 0
Hex 0
Memory Contents
Start 0000
End 0350
Refresh
Memory Location Contents
021F 08
0220 08
0221 08
0222 08
0223 08
0224 08
0225 08
0226 0E
0227 08
0228 08
0229 08
022A 08
022B 08
022C 08
022D 08
@NEXT 0007
LDA 0226
MOV B, A
LDA 0315
STA 0226
MOV A, B
STA 0315
HLT
;1211206342 ERIC CHING KHAI JIE
Ports Stack Symbols
Modify Port's content
Port Address 00 Value 00
00 01 02 03 04 05
Interrupts
IEFF 1 RST 0 INTR
RST 5.5 RST 6.5 RST 7.5 TRAP
Line: 9 HLT: Halt and enter wait state
Messages
Execution completed successfully
Default - j8085sim
File Edit Manage Run Help
Execution Address 0007
Registers
A 6D
B 6D 01 C
D 00 00 E
H 00 00 L
SP FFFF
PC 0015
Flags
S 1
Z 0
AC 0
P 0
CY 0
Decimal Hex Converter
Decimal 0
Hex 0
Memory Contents
Start 0000
End 0350
Refresh
Memory Location Contents
030E 08
030F 08
0310 08
0311 08
0312 08
0313 08
0314 08
0315 0D
0316 08
0317 08
0318 08
0319 08
031A 08
031B 08
031C 08
@NEXT 0007
LDA 0226
MOV B, A
LDA 0315
STA 0226
MOV A, B
STA 0315
HLT
;1211206342 ERIC CHING KHAI JIE
Ports Stack Symbols
Modify Port's content
Port Address 00 Value 00
00 01 02 03 04 05
Interrupts
IEFF 1 RST 0 INTR
RST 5.5 RST 6.5 RST 7.5 TRAP
Line: 5 HLT: Halt and enter wait state
Messages
Execution completed successfully