

CSA

PROBLEM:1
LXI SP,2201H
LXI H,4032H
LXI D,4133H
PUSH H
PUSH D
POP H
POP D
HLT

The screenshot displays the 8085 Simulator interface. The main window is titled "8085 Simulator" and contains several tabs: "Editor", "Assembler", "Registers", "Memory", and "Devices". The "Assembler" tab is active, showing a table of assembly instructions. The "Memory Editor" tab is also active, showing a table of memory addresses and values. The "Simulate" tab is visible at the bottom, showing a "Start From" field set to "0000" and buttons for "Run all At a Time" and "Step By Step".

Assembler Window:

* Address	Label	Mnemonics	Hexcode	Bytes	M-Cycles	T-States
✓ 0000		LXI SP,2201	31	3	3	10
0001			01			
0002			22			
✓ 0003		LXI H,4032	21	3	3	10
0004			32			
0005			40			
✓ 0006		LXI D,4133	11	3	3	10
0007			33			
0008			41			
✓ 0009		PUSH H	E5	1	3	12
✓ 000A		PUSH D	D5	1	3	12
✓ 000B		POP H	E1	1	3	10
✓ 000C		POP D	D1	1	3	10
✓ 000D		HLT	76	1	2	5

Memory Editor Window:

Memory Range: 0000 ---- FFFF

Memory Address	Value
0000	31
0001	01
0002	22
0003	21
0004	32
0005	40
0006	11
0007	33
0008	41
0009	E5
000A	D5
000B	E1
000C	D1
000D	76
21FD	33
21FE	41
21FF	32
2200	40

Simulate Window:

Start From → 0000

Run all At a Time Step By Step

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PROBLEM:2
LXI H,2200H

```

LXI SP,2299H
MOV A,M
INX H
ADC M
PUSH PSW

```

```

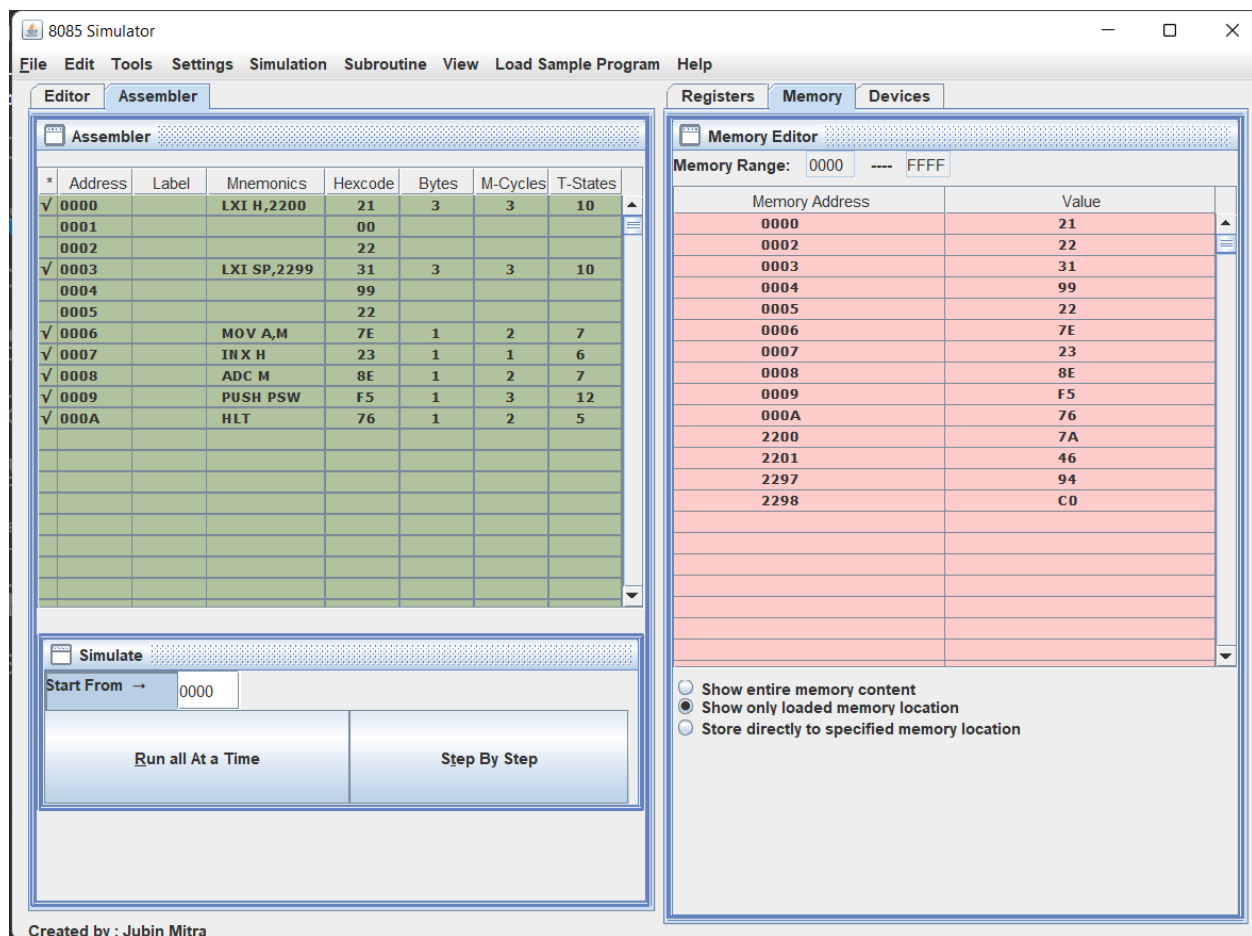
HLT

```

```

#ORG 2200H
#DB 7A,46

```



PROBLEM 3:

```

LXI SP,2099H

```

```

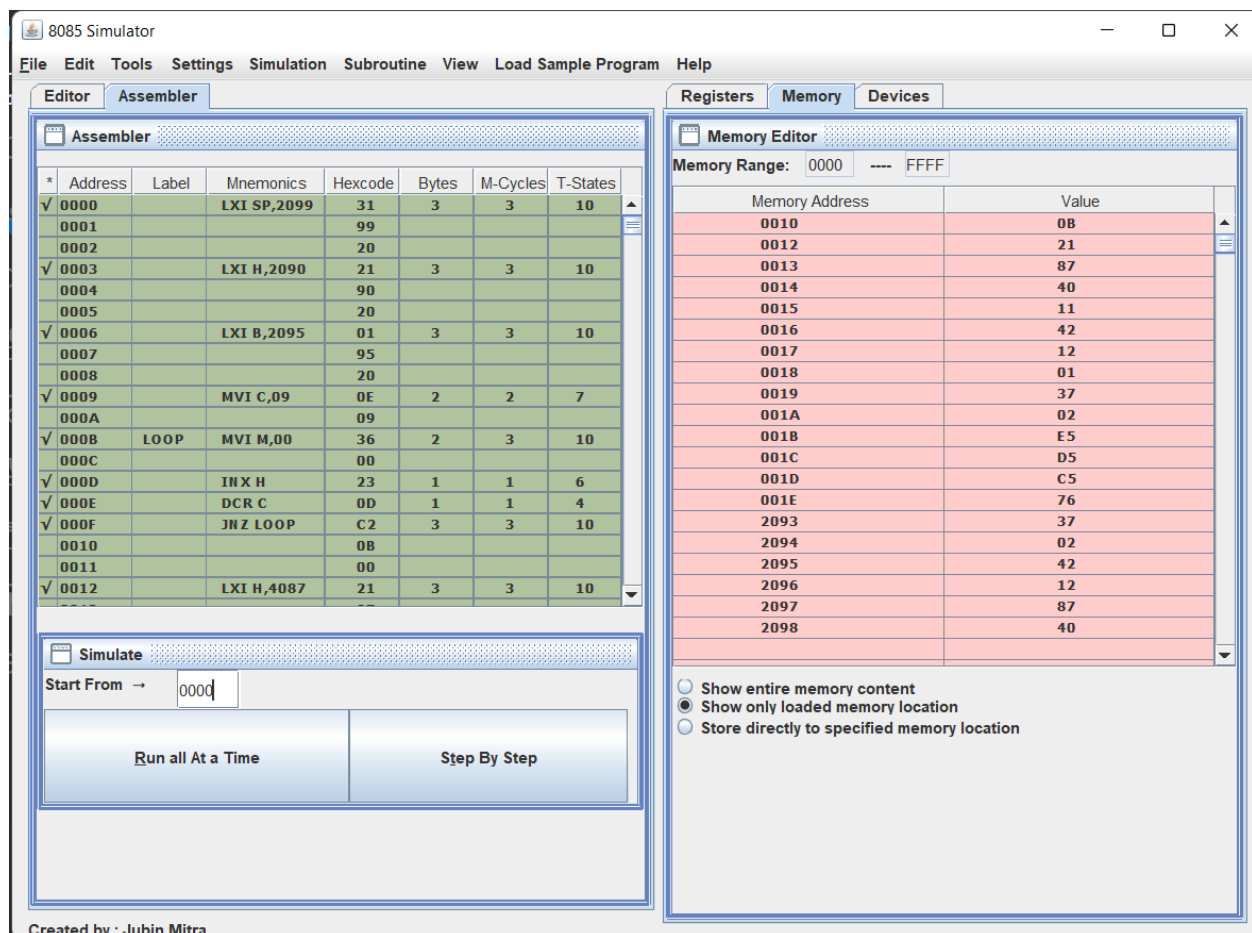
LXI H,2090H
LXI B,2095H
MVI C,09H
LOOP:MVI M,00H
      INX H
      DCR C
      JNZ LOOP

```

```

LXI H,4087H
LXI D,1242H
LXI B,0237H
PUSH H
PUSH D
PUSH B
HLT
#ORG 2095H
#DB 95H

```



PROBLEM:4

```
LXI SP, 2103H
LXI B, 0000H
PUSH B
POP PSW
LXI H, 200BH
CALL DELAY
OUT 01H
HLT
```

```
DELAY:PUSH
H PUSH B
LXI B,00FFH
LOOP: DCX B
MOV A,B
ORA C
```

```
JNZ LOOP
POP B
RET
#ORG 200BH
#DB 00H
```

