

8085 Microprocessor Simulator

File Reset Assembler Debug Help

Registers

A	00	S	0
BC	00 00	Z	1
DE	00 00		
HL	00 00		
PSW	00 00	AC	0
PC	42 22	P	1
SP	00 0A		
Int-Reg	00	C	0

Flag

Load me at:

```

1 LHLD 2050
2 SPHL
3 LHLD 2052
4 XCHG
5 LXI H, 0000H
6 LXI B, 0000H
7 AGAIN: DAD SP
8 JNC START
9 INX B
10 START: DCX D
11 MOV A, E
12 ORA D
13 JNZ AGAIN
14 SHLD 2054
15 MOV L, C
16 MOV H, B
17 SHLD 2055
18 HLT

```

Decimal - Hex Conversion

Decimal	Hex
0	0

I/O Ports

0	-	+	00
---	---	---	----

Memory

0	-	+	00
---	---	---	----

Memory Editor

Start: 2050

Address (Hex)	Address	Data
0802	2050	10
0803	2051	0
0804	2052	5
0805	2053	0
0806	2054	50
0807	2055	5
0808	2056	0
0809	2057	0
080A	2058	0
080B	2059	0
080C	2060	0
080D	2061	0

Line No Assembler Message

0 Program assembled successfully

File Reset Assembler Debug Help

Registers

A	P9
BC	00 00
DE	00 00
HL	00 00
PSW	00 00
PC	42 08
SP	FF FF
Int-Reg	00

Flag

S 0
Z 0
AC 0
P 0
C 0

Load me at:

1 LDA 8050
2 STA 8051
3 STA 8051
4 HLT

Data Stack KeyPad Memory I/O Ports

Start 8050 OK

Address (Hex)	Address	Data
1F72	8050	6
1F73	8051	249
1F74	8052	0
1F75	8053	0
1F76	8054	0
1F77	8055	0
1F78	8056	0
1F79	8057	0
1F7A	8058	0
1F7B	8059	0
1F7C	8060	0
1F7D	8061	0

Line No Assembler Message

0 Program assembled successfully

I/O Ports

0	-	+	00
---	---	---	----

Update Port Value

Memory

0	-	+	00
---	---	---	----

Update Memory

Simulator: Idle

GNUSim8085 - 8085 Microprocessor Simulator

File Reset Assembler Debug Help



Registers

A	54	Flag
BC	44 00	S 0
DE	78 00	Z 0
HL	08 04	A 0
PSW	00 00	AC 0
PC	42 0E	P 0
SP	FF FF	
Int-Reg	00	C 0

Decimal - Hex Conversion

Decimal	Hex
0	0
<input type="button" value="To Hex"/>	<input type="button" value="To Dec"/>

I/O Ports

0	-	+	00
<input type="button" value="Update Port Value"/>			

Memory

0	-	+	00
<input type="button" value="Update Memory"/>			

Load me at:

```

1 LXI H,2050
2 MOV A,M
3 ADD A
4 MOV B,A
5 ADD A
6 ADD A
7 ADD B
8 INX H
9 ADD M
10 INX H
11 MOV M,A
12 HLT

```

Data Stack KeyPad Memory I/O Ports

Start: 2050

OK

Address (Hex)	Address	Data
0802	2050	34
0803	2051	0
0804	2052	84
0805	2053	0
0806	2054	0
0807	2055	0
0808	2056	0
0809	2057	0
080A	2058	0
080B	2059	0
080C	2060	0
080D	2061	0

Line No	Assembler Message
0	Program assembled successfully

GNUSim8085 - 8085 Microprocessor Simulator

File Reset Assembler Debug Help

Registers

A	00	S	0
BC	00 00	Z	0
DE	00 00		
HL	00 00		
PSW	00 00	AC	0
PC	00 00	P	0
SP	00 00		
Int-Reg	00	C	0

Flag

Load me at:

```

1
2 ;<Program title>
3
4 JMP start
5
6 ;data
7
8
9 rcode
10 start: NOP
11 START: NOP
12 LHLD 2050
13 XCBG
14 LHLD 2052
15 MVI C,00
16 MOV A, E
17 SUB L
18 STA 2054
19 MOV A, D
20 SUB H
21 STA 2055
22 HLT
23 hlt

```

Memory

Start	Address (Hex)	Address	Data
2050	0802	2050	2
	0803	2051	0
	0804	2052	3
	0805	2053	0
	0806	2054	1
	0807	2055	1
	0808	2056	0
	0809	2057	0
	080A	2058	0
	080B	2059	0
	080C	2060	0
	080D	2061	0
	080E	2062	0
	080F	2063	0

I/O Ports

Decimal - Hex Conversion

Decimal	Hex
0	0

To Hex To Dec

Update Port Value

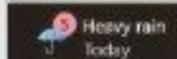
Memory

2055 - + 1

Update Memory

Line No: Assembler Message

Simulator: Idle



13:43
ENG IN
06-11-2025

GNUSim8085 - 8085 Microprocessor Simulator

File Reset Assembler Debug Help

Registers		Flag
A	00	S 0
BC	05 00	Z 1
DE	00 00	AC 0
HL	00 00	P 1
PSW	00 00	C 0
PC	42 15	
SP	FF FF	
Int-Reg	00	

Decimal - Hex Conversion

Decimal	Hex
0	0
<input type="button" value="→ To Hex"/>	<input type="button" value="← To Dec"/>

I/O Ports

0	-	+	00
<input type="button" value="Update Port Value"/>			

Memory

0	-	+	00
<input type="button" value="Update Memory"/>			

Load me at:

```

1
2 ;<Program title>
3
4 jmp start
5
6 ;data
7
8
9 ;code
10 start: nop
11 LDA 8050
12 MOV B,A
13 LDA 8051
14 ADD B
15 STA 8052
16 hlt

```

Address (Hex)	Address	Data
1F72	8050	3
1F73	8051	5
1F74	8052	8
1F75	8053	0
1F76	8054	0
1F77	8055	0
1F78	8056	0
1F79	8057	0
1F7A	8058	0
1F7B	8059	0
1F7C	8060	0
1F7D	8061	0

Line No	Assembler Message
0	Program assembled successfully

Simulator: Idle

GNUSim8085 - 8085 Microprocessor Simulator

File Reset Assembler Debug Help

Registers

A	00	Flag
BC	00 00	S 0
DE	00 00	Z 0
HL	00 00	
PSW	00 00	AC 0
PC	00 00	P 0
SP	00 00	
Int-Reg	00	C 0

Load me at:

```

1 ;<Program title>
2
3
4 jmp start
5
6 :data
7
8 rcode
9 start: nop
10 LDA 2200
11 MOV S,A
12 MVI D,00
13 LDA 2201
14 MOV C,A
15 MOV B,C
16 LRI B,0000
17 BACK: DAD D
18 DCR C
19 JNZ BACK
20 SHLD 2202
21 HLT
22 hlt

```

Memory

Address (Hex)	Address	Data
0898	2200	4
0899	2201	2
089A	2202	8
089B	2203	0
089C	2204	0
089D	2205	0
089E	2206	0
089F	2207	0
08A0	2208	0
08A1	2209	0
08A2	2210	0
08A3	2211	0
08A4	2212	0
08A5	2213	0

I/O Ports

0	-	+	0
---	---	---	---

Update Port Value

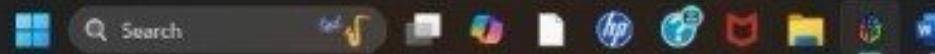
Memory

2202	-	+	8
------	---	---	---

Update Memory

Line No. Assembler Message

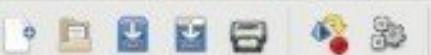
Simulator: Idle



13:33
ENG IN
06-11-2025

GNUSim8085 - 8085 Microprocessor Simulator

File Reset Assembler Debug Help



Registers

A	16	Flag
BC	00 00	S 1
DE	00 00	Z 0
HL	00 00	
PSW	00 00	AC 1
PC	42 12	P 0
SP	FF FF	
Int-Reg	00	C 0

Load me at:

```

1 MVI A, 9AH
2 ANI 80H
3 JZ NEG
4 MVI A, 22
5 JMP ST0
6 NEG: MVI A, 11
7 ST0: STA 8501
8 HLT

```

Decimal - Hex Conversion

Decimal	Hex
0	0
<input type="button" value="To Hex"/>	<input type="button" value="To Dec"/>

I/O Ports

0	-	+	00
<input type="button" value="Update Port Value"/>			

Memory

0	-	+	00
<input type="button" value="Update Memory"/>			

Data Stack KeyPad Memory I/O Ports

Start 8050 OK

Address (Hex)	Address	Data
1F72	8050	15
1F73	8051	11
1F74	8052	0
1F75	8053	0
1F76	8054	0
1F77	8055	0
1F78	8056	0
1F79	8057	0
1F7A	8058	0
1F7B	8059	0
1F7C	8060	0
1F7D	8061	0

Line No Assembler Message
0 Program assembled successfully

Simulator: Idle

GUUSim8085 - 8085 Microprocessor Simulator

Registers

A	16	S	0
BC	00 00	Z	1
DE	00 00	AC	1
HL	00 00		
PSW	00 00		
PC	42 13	P	1
SP	FF FF		
Int-Reg	00	C	0

Flag

Load me at

```

1 LDA 8050H
2 ANI 01
3 JZ LOOP1
4 MVI A,11
5 JMP LOOP2
6 LOOP1: MVI A,22
7 LOOP2: STA 8051
8 HLT
9

```

Decimal - Hex Conversion

Decimal	Hex
0	0

To Hex To Dec

I/O Ports

0	-	+	00
---	---	---	----

Update Port Value

Memory

0	-	+	00
---	---	---	----

Update Memory

Data Stack KeyPad Memory I/O Ports

Memory

Start

Address (Hex)	Address	Data
1F72	8050	20
1F73	8051	22
1F74	8052	0
1F75	8053	0
1F76	8054	0
1F77	8055	0
1F78	8056	0
1F79	8057	0
1F7A	8058	0
1F7B	8059	0
1F7C	8060	0
1F7D	8061	0

Line No Assembler Message

0 Program assembled successfully

GNUSim8085 - 8085 Microprocessor Simulator

File Reset Assembler Debug Help

Registers

A	00	Flag
BC	00 00	S 0
DE	00 00	Z 0
HL	00 00	N 0
PSW	00 00	AC 0
PC	00 00	P 0
SP	00 00	C 0
Int-Reg	00	

Load me at:

```

1 ;<Program title>
2
3
4 jmp start
5
6 ;data
7
8
9 ;code
10 start: nop
11 START: NOP
12 LDA 3050
13 MOV B,A
14 LDA 3051
15 ADD B
16 STA 3052
17 LDA 3053
18 MOV B,A
19 LDA 3054
20 ADC B
21 STA 3055
22 HLT
23 hit

```

Decimal - Hex Conversion

Decimal	Hex
0	0

To Hex To Dec

I/O Ports

0	-	+	0
---	---	---	---

Update Port Value

Memory

3055	-	+	10
------	---	---	----

Update Memory

Start 3050

Address (Hex) Address Data

0BEA	3050	2
0EBB	3051	3
0ECC	3052	5
0EDD	3053	5
0EEE	3054	5
0EF	3055	10
0BF0	3056	0
0BF1	3057	0
0BF2	3058	0
0BF3	3059	0
0BF4	3060	0
0BF5	3061	0
0BF6	3062	0
0BF7	3063	0

Line No Assembler Message

Simulator: Idle



13:40
Rain warning
in effect ENG IN WiFi 06-11-2025



```

81 MOU AX,[1100H]
82 MOU BX,[1102H]
83 DIV BX
84 MOU [1200H],AX
85 MOU [1202H],DX
86 HLT

```

original source code

```

81 MOU AX,[1100H]
82 MOU BX,[1102H]
83 DIV BX
84 MOU [1200H],AX
85 MOU [1202H],DX
86 HLT

```

emulator: noname.bin

file math debug view external virtual devices virtual drive help

Load reload step back single step run step delay ms: 0

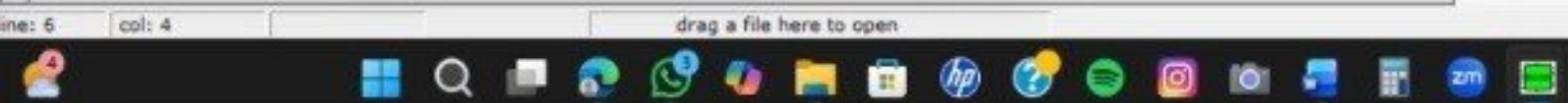
	H	L
AX	00	01
BX	00	10
CX	00	00
DX	00	00
CS	0100	
IP	0010	
SS	0100	
SP	FFFF	
BP	0000	
SI	0000	
DI	0000	
DS	0100	
ES	0100	

	0100:0010	0100:0010
81000: A1 161 i	MOU AX, [01100h]	
81001: 00 000 NULL	MOU BX, [01102h]	
81002: 11 012 <	DIV BX	
81003: 0B 139 I	MOU [01200h], AX	
81004: 1E 030 A	MOU [01202h], DX	
81005: 02 002 S	HLT	
81006: 11 017 <	NOP	
81007: F7 242 Z	NOP	
81008: F3 243 S	NOP	
81009: A3 163 U	NOP	
8100A: 00 000 NULL	NOP	
8100B: 12 018 T	NOP	
8100C: 09 137 E	NOP	
8100D: 16 022 M	NOP	
8100E: 02 002 S	NOP	
8100F: 12 018 T	NOP	
81010: F4 244 R	NOP	
81011: 90 144 E	NOP	
81012: 90 144 E	NOP	
81013: 90 144 E	NOP	
81014: 90 144 E	NOP	
81015: 90 144 E	NOP	

screen source reset aux vars debug stack flags

Random Access Memory

0100:1100	update	table	list
0100:1100 10 00 10 00 00 00 00 00-00 00 00 00 00 00 00 00 00			
0100:1110 00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00 00			
0100:1120 00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00 00			
0100:1130 00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00 00			
0100:1140 00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00 00			
0100:1150 00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00 00			
0100:1160 00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00 00			
0100:1170 00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00 00			



GNUSim8085 - 8085 Microprocessor Simulator

File Reset Assembler Debug Help



Registers		Flag
A	00	S 0
BC	05 00	
DE	00 00	Z 1
HL	00 00	
PSW	00 00	AC 0
PC	42 15	P 1
SP	FF FF	
Int-Reg	00	C 0

Decimal - Hex Conversion

Decimal	Hex
0	0
<input type="button" value="To Hex"/>	<input type="button" value="To Dec"/>

I/O Ports

0	-	+	00
<input type="button" value="Update Port Value"/>			

Memory

0	-	+	00
<input type="button" value="Update Memory"/>			

```

Load me at  
1 MVI D, 00
2 MVI A,00
3 LXI H,4150 ;loading first
4 MOV B,M
5 INX H
6 MOV C,M
7 LOOP: ADD B
8 JNC NEXT
9 INR D
10 NEXT: DCR C
11 JNZ LOOP
12 STA 4152
13 HLT

```

Memory

Start

Address (Hex)	Address	Data
1036	4150	8
1037	4151	6
1038	4152	48
1039	4153	0
103A	4154	0
103B	4155	0
103C	4156	0
103D	4157	0
103E	4158	0
103F	4159	0
1040	4160	0
1041	4161	0

Line No Assembler Message

0 Program assembled successfully

Simulator: Idle

GNUSim8085 - 8085 Microprocessor Simulator

File Reset Assembler Debug Help



Registers		Flag
A	00	S 0
BC	00 00	Z 0
DE	2C 04	
HL	0B 0B	
PSW	00 00	AC 0
PC	07 00	P 0
SP	0B 0B	
Int-Reg	00	C 0

Decimal - Hex Conversion

Decimal	Hex
0	0
<input type="button" value="To Hex"/>	<input type="button" value="To Dec"/>

I/O Ports

0	-	+	00
<input type="button" value="Update Port Value"/>			

Memory

0	-	+	00
<input type="button" value="Update Memory"/>			

Load me at

```

1 LHLD 2050
2 SPHL
3 LHLD 2052
4 XCHG
5 LXI H,0000H
6 LXI B,0000H
7 DAD SP
8 JNC 2013
9 INX B
10 DCX D
11 MOV A,E
12 ORA D
13 JNZ 2008
14 SHLD 2054
15 MOV L,C
16 MOV H,B
17 SHLD 2056
18 hlt

```

Memory

Data	Stack	KeyPad	Memory	I/O Ports
Start 2050				OK
Address (Hex)	Address	Data		
0802	2050	11		
0803	2051	11		
0804	2052	4		
0805	2053	44		
0806	2054	44		
0807	2055	0		
0808	2056	0		
0809	2057	0		
080A	2058	0		
080B	2059	0		
080C	2060	0		
080D	2061	0		

Line No	Assembler Message
0	Program assembled successfully

Simulator: Idle

Registers

	A	B	C	D	E	F	PSW	PC	SP	Int-Reg	Flag
	01				00					00	S 0
BC	02	00									Z 0
DE	00	00									
HL	00	00									
PSW	00	00					AC 0				
PC	42	0C					P 0				
SP	FF	FF									
Int-Reg	00						C 0				

Load me at:

Decimal - Hex Conversion

Decimal	Hex
0	0

I/O Ports

Port	Value
0	00

Update Port Value

Memory

Address	Data
0000	00

Update Memory

Flag

Start: OK

Address (Hex)	Address	Data
1F72	8050	2
1F73	8051	3
1F74	8052	1
1F75	8053	0
1F76	8054	0
1F77	8055	0
1F78	8056	0
1F79	8057	0
1F7A	8058	0
1F7B	8059	0
1F7C	8060	0
1F7D	8061	0
1F7E	8062	0
1F7F	8063	0

Line No Assembler Message

Line No	Assembler Message
0	Program assembled successfully

Simulator: Idle

GNUSim8085 - 8085 Microprocessor Simulator

File Reset Assembler Debug Help

Registers		Flag
A	00	S 0
BC	00 00	Z 1
DE	00 00	
HL	00 00	
PSW	00 00	AC 0
PC	42 20	P 1
SP	FF FF	
Int-Reg	00	C 0

Decimal - Hex Conversion

Decimal	Hex
0	0
<input type="button" value="To Hex"/>	<input type="button" value="To Dec"/>

I/O Ports

0	-	+	00
<input type="button" value="Update Port Value"/>			

Memory

0	-	+	04
<input type="button" value="Update Memory"/>			

Load me at

```

1 Start: IN 00H
2      MOV B, A
3      IN 01H
4      CMP B
5      JZ OP
6      JNC REC
7      MOV C,A
8      MOV A,B
9      MOV B,C
10
11 REC:   SUB B
12      CMP B
13      JZ OP
14      JNC REC
15      MOV C,A
16      MOV A,B
17      MOV B,C
18      JMP REC
19
20 OP:    OUT 02H
21      HLT

```

Memory

Start

OK

Address (Hex)	Address	Data
0000	0	4
0001	1	24
0002	2	4
0003	3	0
0004	4	0
0005	5	0
0006	6	0
0007	7	0
0008	8	0
0009	9	0
000A	10	0
000B	11	0

Line No	Assembler Message
0	Program assembled successfully

A	00
BC	00 00
DE	04 03
HL	08 08
PSW	00 00
PC	42 0C
SP	FF FF
Int-Reg	00
C	0

1 LHLD 2050
2 XCHG
3 LRLD 2052
4 DAD D
5 SHLD 2054
6 HLT

Decimal - Hex Conversion

Decimal	Hex
0	0

I/O Ports

0	-	+	00
---	---	---	----

 Update Port Value**Memory**

0	-	+	00
---	---	---	----

 Update Memory

Start 2050

Address (Hex)	Address	Data
0802	2050	3
0803	2051	4
0804	2052	5
0805	2053	4
0806	2054	8
0807	2055	8
0808	2056	0
0809	2057	0
080A	2058	0
080B	2059	0
080C	2060	0
080D	2061	0
080E	2062	0
080F	2063	0

Line No	Assembler Message
0	Program assembled successfully

Simulator: Idle

emu8086 - assembler and microprocessor emulator 4.08

file edit bookmarks assembler emulator math ascii codes help

new open examples save
compile emulate calculator converter options help about

```
81 MOU AX,[1100H]
82 MOU BX,[1102H]
83 DIV BX
84 MOU [1200H],AX
85 MOU [1202H],DX
86 HLT
```

emulator: noname.bin

file math debug view external virtual devices virtual drive help

	Load	reload	step back	single step	run	step delay ms: 0
registers	H L					
AX	00 02	0100:0010		0100:0010		
BX	00 03	0100:0001:0000 NULL		MOU AX, [01100h]		
CX	00 00	0100:0002:0117		MOU BX, [01102h]		
DX	00 00	0100:0003:0139		DIV BX		
CS	0100	0100:0004:1E80		MOU [01200h], AX		
IP	0010	0100:0005:02002		MOU [01202h], DX		
SS	0100	0100:0006:11817		HLT		
SP	FFFE	0100:0007:02243		NOP		
BP	0000	0100:0008:03163		NOP		
SI	0000	0100:0009:00000		NOP		
DI	0000	0100:000A:00000		NOP		
DS	0100	0100:000B:00000		NOP		
ES	0100	0100:000C:00000		NOP		
		0100:000D:00000		NOP		
		0100:000E:00000		NOP		
		0100:000F:00000		NOP		
		0100:0010:00000		NOP		
		0100:0011:00000		NOP		
		0100:0012:00000		NOP		
		0100:0013:00000		NOP		
		0100:0014:00000		NOP		
		0100:0015:00000		...		
			screen	source	reset	aux
			vars	debug	stack	flags

line: 6 col: 4

drag a file here to open


 ENG
IN 22:24
07-11-2025

GNUsim8085 - 8085 Microprocessor Simulator

File Reset Assembler Debug Help



Registers		Flag
A	63	S 1
BC	63 00	
DE	00 00	Z 0
HL	00 00	
PSW	00 00	AC 0
PC	42 10	P 0
SP	FF FF	
Int-Reg	00	C 1

Decimal - Hex Conversion

Decimal	Hex
0	0
<input type="button" value="To Hex"/>	<input type="button" value="To Dec"/>

I/O Ports

0	-	+	00
<input type="button" value="Update Port Value"/>			

Memory

0	-	+	1D
<input type="button" value="Update Memory"/>			

Load me at

```

1 LDA 2050
2 MOV B,A
3 LDA 2051
4 CMP B
5 JNC STORE
6 MOV A,B
7 STORE: STA 2052
8 HLT

```

Memory

Address (Hex)	Address	Data
0802	2050	99
0803	2051	22
0804	2052	99
0805	2053	0
0806	2054	0
0807	2055	0
0808	2056	0
0809	2057	0
080A	2058	0
080B	2059	0
080C	2060	0
080D	2061	0

Line No Assembler Message
0 Program assembled successfully

Simulator: Idle

GNUSim8085 - 8085 Microprocessor Simulator

File Reset Assembler Debug Help



Registers

	A	B	C	Flag
	B4	09		S 0
BC	14	09		Z 1
DE	B4	00		AC 0
HL	00	00		P 1
PSW	00	00		C 0
PC	42	17		
SP	FF	FF		
Int-Reg	00			

Decimal - Hex Conversion

Decimal	Hex
0	0

I/O Ports

2	
09	

Memory

0	
00	

```

Load me at : 1 ; Program to compute the LCM of three 8-bit numbers

1      ; Input Integer 1 from I/O port
2      ; Move A → C
3      ; Move A → D
4 START: IN 00H          ; Input Integer 1 from I/O port
5      MOV C, A           ; Move A → C
6      MOV D, A           ; Move A → D
7      IN 01H          ; Input Integer 2 from I/O port
8      MOV B, A           ; Move A → B
9      MOV A, C           ; Move C → A

10     Call LCM          ; Call the LCM subroutine
11     IN 02H          ; Input Integer 3 from I/O port
12     MOV C, A           ; Move A → C
13     MOV D, A           ; Move A → D
14     IN 03H          ; Input old LCM from I/O port
15     MOV B, A           ; Move A → B
16     MOV A, C           ; Move C → A

17     Call LCM          ; Call the LCM subroutine
18     HLT               ; Terminate

19     LCM:   SUB B       ; Store A - B → A
20     JNC LCM          ; Jump to LCM if not carry (A > 0)
21     ADD B       ; Store A + B → A
22     CPI 00            ; Compare A with 00H
23     JZ OP             ; Jump to OP if zero (A = 00H)
24     MOV A,D          ; Move D → A
25     ADD C       ; Store A+C → A
26     MOV D,A          ; Move A → D
27     JMP LCM          ; Unconditional Jump to LCM

```

Data Stack KeyPad Memory I/O Ports

I/O Ports

Start

Address (Hex) Address Data

00	0	4
01	1	5
02	2	9
03	3	180
04	4	0
05	5	0
06	6	0
07	7	0
08	8	0
09	9	0
0A	10	0
0B	11	0
0C	12	0
0D	13	0
0E	14	0
0F	15	0
10	16	0
11	17	0
..

Line No Assembler Message

0 Program assembled successfully

Registers

A	54
BC	44 00
DE	04 03
HE	08 04
PSW	00 00
PC	42 0E
SP	FF FF
Int-Reg	00

Flag

S	0
Z	0
AC	0
P	0
C	0

Load me at:

1 LXT H,2050
 2 MOV A,M
 3 ADD A
 4 MOV B,,A
 5 ADD A
 6 ADD A
 7 ADD B
 8 INX R
 9 ADD M
 10 INX R
 11 MOV M,A
 12 HLT

Decimal - Hex Conversion

Decimal	Hex
0	0

I/O Ports

0	-	+	00
---	---	---	----

Update Port Value

Memory

0	-	+	00
---	---	---	----

Update Memory

Data Stack KeyPad Memory I/O Ports

Start: 2050

Address (Hex)	Address	Data
0802	2050	34
0803	2051	0
0804	2052	84
0805	2053	0
0806	2054	0
0807	2055	0
0808	2056	0
0809	2057	0
080A	2058	0
080B	2059	0
080C	2060	0
080D	2061	0
080E	2062	0
080F	2063	0

Line No Assembler Message

0 Program assembled successfully

GNUSim8085 - 8085 Microprocessor Simulator

File Reset Assembler Debug Help

Registers

A	16
BC	00 00
DE	00 00
HL	00 00
PSW	00 00
PC	42 12
SP	FF FF
Int-Reg	00

Flag

S	1
Z	0
AC	1
P	0
C	0

Load me at:

```
1 MVI A, 9AH
2 ANI 80H
3 JZ NEG
4 MVI A, 22
5 JMP STO
6 NEG: MVI A, 11
7 STO: STA 8501
8 HLT
```

Decimal - Hex Conversion

Decimal	Hex
0	0

To Hex To Dec

I/O Ports

0	-	+	00
---	---	---	----

Update Port Value

Memory

0	-	+	00
---	---	---	----

Update Memory

Data Stack KeyPad Memory I/O Ports

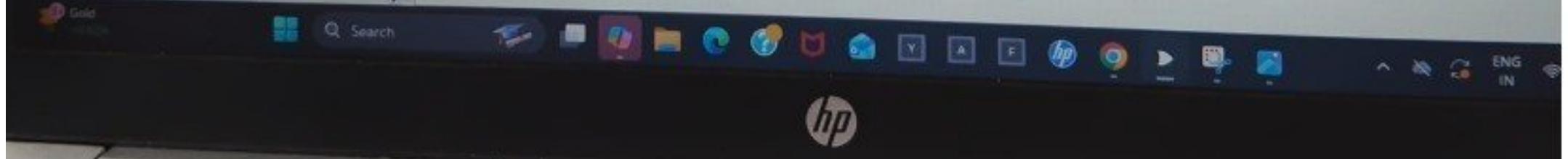
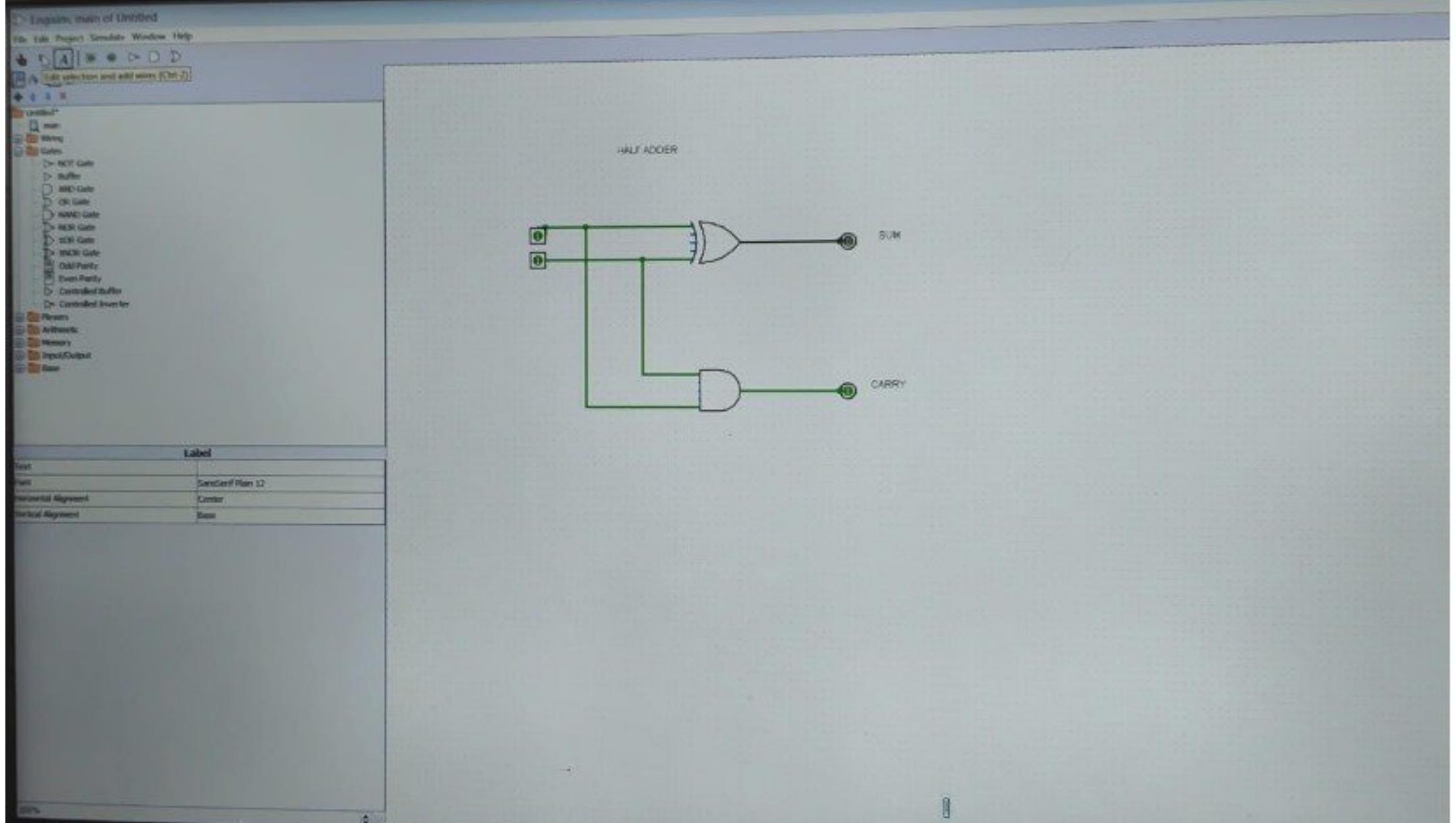
Start 8050

Address (Hex)	Address	Data
1F72	8050	15
1F73	8051	22
1F74	8052	0
1F75	8053	0
1F76	8054	0
1F77	8055	0
1F78	8056	0
1F79	8057	0
1F7A	8058	0
1F7B	8059	0
1F7C	8060	0
1F7D	8061	0

Line No Assembler Message

0 Program assembled successfully

Simulator: Idle



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File Edit Project Modules Window Help

Components

- Dr. AND Gate
- Dr. OR Gate
- Dr. NOT Gate
- Dr. AND-OR Gate
- Dr. OR-AND Gate
- Dr. XNOR Gate
- Dr. XNOR Gate
- Dr. AND-OR-IN Gate
- Dr. OR-AND-IN Gate
- Dr. Inverter
- Dr. Buffer
- Dr. Invert Buffer
- Dr. Constant
- Dr. Constant Buffer
- Dr. Power
- Dr. Address
- Dr. Memory
- Dr. Input Output
- Dr. Clock

Circuit Name:

Full Adder

Component List:

None

None