GNUSim8085 - 8085 Microprocessor Simulator

File Reset Assembler Debug Help

Registers

A	0B	
BC	05	00
DE	00	00
HL	00	00
PSW	00	00
PC	42	0C
SP	FF	FF
Int-Reg	00	

Flag

S 0 Z 0 AC 0 P 0 C 0

Decimal - Hex Convertion

Decimal: 0 — To Hex

Hex: 0 — To Dec

I/O Ports

0 − + 00

Update Port Value

Memory

8501 − + 06

Update Memory

Load me at

```
1  LDA 8500
2  MOV B,A
3  LDA 8501
4  ADD B
5  STA 8502
6  RST 1
```

Data Stack KeyPad **Memory** I/O Ports

Start 8500 OK

Address (Hex)	Address	Data
2134	8500	5
2135	8501	6
2136	8502	11
2137	8503	0
2138	8504	0
2139	8505	0
213A	8506	0
213B	8507	0
213C	8508	0
213D	8509	0
213E	8510	0
213F	8511	0

Line No	Assembler Message
0	Program assembled successfully

Simulator: Idle

GNUSim8085 - 8085 Microprocessor Simulator

File Reset Assembler Debug Help

Registers

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

Flag

S 0
Z 1
AC 0
P 1
C 0

Decimal - Hex Convertion

Decimal: 0 — To Hex

Hex: 0 — To Dec

I/O Ports

0 − + 00

Update Port Value

Memory

8001 − + 04

Update Memory

Load me at

```
1  LDA 8000
2  MOV B, A
3  LDA 8001
4  SUB B
5  STA 8002
6  RST 1
```

Data | Stack | KeyPad | **Memory** | I/O Ports

Start 8000 OK

Address (Hex)	Address	Data
1F40	8000	4
1F41	8001	4
1F42	8002	0
1F43	8003	0
1F44	8004	0
1F45	8005	0
1F46	8006	0
1F47	8007	0
1F48	8008	0
1F49	8009	0
1F4A	8010	0
1F4B	8011	0

Line No	Assembler Message
0	Program assembled successfully

Simulator: Idle

GNUSim8085 - 8085 Microprocessor Simulator

File Reset Assembler Debug Help

Registers

A	1E	
BC	05	00
DE	00	00
HL	00	00
PSW	00	00
PC	42	1A
SP	FF	FF
Int-Reg	00	

Flag

S 0
Z 1
AC 0
P 1
C 0

Decimal - Hex Convertion

Decimal: 0 — To Hex
Hex: 0 — To Dec

I/O Ports

0 − + 00
Update Port Value

Memory

8001 − + 06
Update Memory

Load me at

```
1  LDA 8000
2  MOV B, A
3  LDA 8001
4  MOV C, A
5  CPI 00
6  JZ LOOP
7  XRA A
8  LOOP1: ADD B
9  DCR C
10 JZ LOOP
11 JMP LOOP1
12 LOOP: STA 8005
13 RST 1
```

Data | Stack | KeyPad | **Memory** | I/O Ports

Start 8000 OK

Address (Hex)	Address	Data
1F40	8000	5
1F41	8001	6
1F42	8002	0
1F43	8003	0
1F44	8004	0
1F45	8005	30
1F46	8006	0
1F47	8007	0
1F48	8008	0
1F49	8009	0
1F4A	8010	0
1F4B	8011	0

Line No	Assembler Message
0	Program assembled successfully

Simulator: Idle

GNUSim8085 - 8085 Microprocessor Simulator

File Reset Assembler Debug Help

Registers

A	01	
BC	05	01
DE	00	00
HL	00	00
PSW	00	00
PC	42	1B
SP	FF	FF
Int-Reg	00	

Flag

S 1
Z 0
AC 0
P 1
C 1

Decimal - Hex Convertion

Decimal: 0 — To Hex

Hex: 0 — To Dec

I/O Ports

0 − + 00

Update Port Value

Memory

8502 − + 01

Update Memory

Load me at

```
1  LDA 8501
2  MOV B,A
3  LDA 8500
4  MVI C,00
5  LOOP: CMP B
6  JC LOOP1
7  SUB B
8  INR C
9  JMP LOOP
10 STA 8503
11 DCR C
12 MOV A,C
13 LOOP1: STA 8502
14 RST 1
```

Data | Stack | KeyPad | **Memory** | I/O Ports

Start 8501 OK

Address (Hex)	Address	Data
2134	8500	6
2135	8501	5
2136	8502	1
2137	8503	0
2138	8504	0
2139	8505	0
213A	8506	0
213B	8507	0
213C	8508	0
213D	8509	0
213E	8510	0
213F	8511	0

Line No	Assembler Message
0	Program assembled successfully

Simulator: Idle

GNUSim8085 - 8085 Microprocessor Simulator

File Reset Assembler Debug Help

Registers

A	00	
BC	00	00
DE	00	0A
HL	00	05
PSW	00	00
PC	42	14
SP	FF	FF
Int-Reg	00	

Flag

S 0
Z 1
AC 0
P 1
C 0

Decimal - Hex Convertion

Decimal: 0 — To Hex

Hex: 0 — To Dec

I/O Ports

0 − + 00

Update Port Value

Memory

2050 − + 0A

Update Memory

Load me at

```
1  LHLD 2050
2  XCHG
3  LHLD 2052
4  MVI C,00
5  MOV A, E
6  SUB L
7  STA 2054
8  MOV A, D
9  SUB H
10 STA 2055
11 HLT
```

Data | Stack | KeyPad | **Memory** | I/O Ports

Start 2050 OK

Address (Hex)	Address	Data
0802	2050	10
0803	2051	0
0804	2052	5
0805	2053	0
0806	2054	5
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	00	
BC	00	01
DE	00	00
HL	00	00
PSW	00	00
PC	42	17
SP	FF	FF
Int-Reg	00	

Flag

S 0
Z 1
AC 0
P 1
C 0

Decimal - Hex Convertion

Decimal: 0 — To Hex

Hex: 0 — To Dec

I/O Ports

0 − + 00

Update Port Value

Memory

3051 − + 06

Update Memory

Load me at

```
1  LDA 3050
2  MOV B,A
3   LDA 3051
4  ADD B
5   STA 3052
6   LDA 3053
7   MOV B,A
8  LDA 3054
9  ADC B
10  STA 3055
11 HLT
```

Data | Stack | KeyPad | **Memory** | I/O Ports

Start 3050 OK

Address (Hex)	Address	Data
0BEA	3050	5
0BEB	3051	6
0BEC	3052	11
0BED	3053	0
0BEE	3054	0
0BEF	3055	0
0BF0	3056	0
0BF1	3057	0
0BF2	3058	0
0BF3	3059	0
0BF4	3060	0
0BF5	3061	0

Line No	Assembler Message
0	Program assembled successfully

Simulator: Idle

GNUSim8085 - 8085 Microprocessor Simulator

File Reset Assembler Debug Help

Registers

A	01	
BC	05	01
DE	00	00
HL	00	00
PSW	00	00
PC	42	1B
SP	FF	FF
Int-Reg	00	

Flag

S 1
Z 0
AC 0
P 1
C 1

Decimal - Hex Convertion

Decimal: 0 — To Hex

Hex: 0 — To Dec

I/O Ports

0 − + 00

Update Port Value

Memory

8050 − + 0A

Update Memory

Load me at

```
1  LDA 8501
2  MOV B,A
3  LDA 8500
4  MVI C,00
5  LOOP: CMP B
6  JC LOOP1
7  SUB B
8  INR C
9  JMP LOOP
10 STA 8503
11 DCR C
12 MOV A,C
13 LOOP1: STA 8502
14 RST 1
```

Data | Stack | KeyPad | **Memory** | I/O Ports

Start 8500 OK

Address (Hex)	Address	Data
2134	8500	6
2135	8501	5
2136	8502	1
2137	8503	0
2138	8504	0
2139	8505	0
213A	8506	0
213B	8507	0
213C	8508	0
213D	8509	0
213E	8510	0
213F	8511	0

Line No	Assembler Message
0	Program assembled successfully

Simulator: Idle

GNUSim8085 - 8085 Microprocessor Simulator

File Reset Assembler Debug Help

Registers

A	00	
BC	00	00
DE	00	00
HL	00	00
PSW	00	00
PC	42	22
SP	00	0A
Int-Reg	00	

Flag

S 0 Z 1 AC 0 P 1 C 0

Decimal - Hex Convertion

Decimal: 0 — To Hex

Hex: 0 — To Dec

I/O Ports

0 − + 00

Update Port Value

Memory

2052 − + 0A

Update Memory

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
```

Data | Stack | KeyPad | **Memory** | I/O Ports

Start 2050 OK

Address (Hex)	Address	Data
0802	2050	10
0803	2051	0
0804	2052	10
0805	2053	0
0806	2054	100
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	78	
BC	00	06
DE	00	78
HL	00	00
PSW	00	00
PC	42	1B
SP	FF	FF
Int-Reg	00	

Flag

S 0
Z 1
AC 0
P 1
C 0

Decimal - Hex Convertion

Decimal: 0 — To Hex
Hex: 0 — To Dec

I/O Ports

0 − + 00
Update Port Value

Memory

2001 − + 05
Update Memory

Load me at

```
1  LDA 2001
2  MOV B,A
3  MVI C,#01
4  MVI E,#01
5  LOOP: MOV D,C
6  MVI A,00H
7  LP: ADD E
8  DCR D
9  JNZ LP
10 MOV E,A
11 INR C
12 DCR B
13 JNZ LOOP
14 MOV A,E
15 STA 2010
16 HLT
```

Data | Stack | KeyPad | **Memory** | I/O Ports

Start 2001 OK

Address (Hex)	Address	Data
07D1	2001	5
07D2	2002	0
07D3	2003	0
07D4	2004	0
07D5	2005	0
07D6	2006	0
07D7	2007	0
07D8	2008	0
07D9	2009	0
07DA	2010	120
07DB	2011	0
07DC	2012	0

Line No	Assembler Message
0	Program assembled successfully

Simulator: Idle