



Registers

| | |
|---------|-------|
| A | 19 |
| BC | 19 00 |
| DE | 00 00 |
| HL | 1F 46 |
| PSW | 00 00 |
| PC | 42 0F |
| SP | FF FF |
| Int-Reg | 00 |

Flag

| | |
|----|---|
| S | 0 |
| Z | 1 |
| AC | 0 |
| P | 1 |
| C | 0 |

Load me at

```
1 LDA 2001
2 MOV B,A
3 LDA 2002
4 STA 2001
5 MOV A,B
6 STA 2002
7 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 2001

OK

Address (Hex) Address Data

| | | |
|------|------|----|
| 07D1 | 2001 | 37 |
| 07D2 | 2002 | 25 |
| 07D3 | 2003 | 0 |
| 07D4 | 2004 | 0 |
| 07D5 | 2005 | 0 |
| 07D6 | 2006 | 0 |
| 07D7 | 2007 | 0 |
| 07D8 | 2008 | 0 |
| 07D9 | 2009 | 0 |
| 07DA | 2010 | 0 |
| 07DB | 2011 | 0 |
| 07DC | 2012 | 0 |
| 07DD | 2013 | 0 |
| 07DE | 2014 | 0 |

Line No Assembler Message

0 Program assembled successfully

Simulator: Idle





Registers

| | |
|---------|-------|
| A | E9 |
| BC | 00 00 |
| DE | 00 00 |
| HL | 1F 40 |
| PSW | 00 00 |
| PC | 42 0D |
| SP | FF FF |
| Int-Reg | 00 |

Flag

| | |
|----|---|
| S | 1 |
| Z | 0 |
| AC | 0 |
| P | 0 |
| C | 0 |

Load me at

```
1 LDA 3000
2 CMA
3 STA 3001
4 ADI 01
5 STA 3002
6 HLT
7
```

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 3000

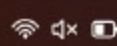
OK

| Address (Hex) | Address | Data |
|---------------|---------|------|
| 0BB8 | 3000 | 23 |
| 0BB9 | 3001 | 232 |
| 0BBA | 3002 | 233 |
| 0BBB | 3003 | 0 |
| 0BBC | 3004 | 0 |
| 0BBD | 3005 | 0 |
| 0BBE | 3006 | 0 |
| 0BBF | 3007 | 0 |
| 0BC0 | 3008 | 0 |
| 0BC1 | 3009 | 0 |
| 0BC2 | 3010 | 0 |
| 0BC3 | 3011 | 0 |
| 0BC4 | 3012 | 0 |
| 0BC5 | 3013 | 0 |

Line No Assembler Message

0 Program assembled successfully

Simulator: Idle





Registers

| | |
|---------|-------|
| A | 20 |
| BC | 00 00 |
| DE | 00 18 |
| HL | 08 07 |
| PSW | 00 00 |
| PC | 42 15 |
| SP | FF FF |
| Int-Reg | 00 |

Flag

| | |
|----|---|
| S | 0 |
| Z | 1 |
| AC | 0 |
| P | 1 |
| C | 0 |

Load me at

```
1 LXI H,2050
2 MOV C,M
3 DCR C
4 INX H
5 MOV A,M
6 LOOP1: INX H
7 CMP M
8 JNC LOOP
9 MOV A,M
10 LOOP: DCR C
11 JNZ LOOP1
12 STA 2058
13 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 2050

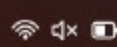
OK

| Address (Hex) | Address | Data |
|---------------|---------|------|
| 0802 | 2050 | 5 |
| 0803 | 2051 | 16 |
| 0804 | 2052 | 32 |
| 0805 | 2053 | 12 |
| 0806 | 2054 | 14 |
| 0807 | 2055 | 18 |
| 0808 | 2056 | 0 |
| 0809 | 2057 | 0 |
| 080A | 2058 | 32 |
| 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





Registers

| | |
|---------|-------|
| A | 18 |
| BC | 00 05 |
| DE | 00 18 |
| 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 |

Load me at

```
1 LDA 2001
2 MOV B,A
3 MVI C,01H
4 MVI E,01H
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
17
```

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 2001

OK

| Address (Hex) | Address | Data |
|---------------|---------|------|
| 07D1 | 2001 | 4 |
| 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 | 24 |
| 07DB | 2011 | 0 |
| 07DC | 2012 | 0 |
| 07DD | 2013 | 0 |
| 07DE | 2014 | 0 |

Line No Assembler Message

0 Program assembled successfully

Simulator: Idle



Registers

| | |
|---------|-------|
| A | 10 |
| BC | 00 00 |
| DE | 00 00 |
| HL | 1F 40 |
| PSW | 00 00 |
| PC | 42 0E |
| SP | FF FF |
| Int-Reg | 00 |

Flag

| | |
|----|---|
| S | 0 |
| Z | 1 |
| AC | 0 |
| P | 1 |
| C | 0 |

Load me at

```
1 LXI H,8000
2 XRA A
3 MOV B,M
4 LOOP: ADD M
5 DCR B
6 JNZ LOOP
7 STA 8001
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 8000

OK

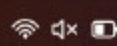
Address (Hex) Address Data

| | | |
|------|------|----|
| 1F40 | 8000 | 4 |
| 1F41 | 8001 | 16 |
| 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 |
| 1F4C | 8012 | 0 |
| 1F4D | 8013 | 0 |

Line No Assembler Message

0 Program assembled successfully

Simulator: Idle





Registers

| | |
|---------|-------|
| A | 00 |
| BC | 1D 00 |
| DE | 00 00 |
| HL | 0D B1 |
| PSW | 00 00 |
| PC | 42 1E |
| SP | FF FF |
| Int-Reg | 00 |

Flag

| | |
|----|---|
| S | 0 |
| Z | 1 |
| AC | 0 |
| P | 1 |
| C | 0 |

Load me at

```
1  LOOP: LXI H,3500
2  MVI D,00
3  MVI C,05
4  LOOP1: MOV A,M
5  INX H
6  CMP M
7  JNC LOOP2
8  MOV B,M
9  MOV M,A
10 DCX H
11 MOV M,B
12 INX H
13 MVI D,01
14 LOOP2: DCR C
15 JNZ LOOP1
16 MOV A,D
17 RRC
18 JC LOOP
19 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

Simulator: Idle

Data Stack KeyPad Memory I/O Ports

Start 3500

OK

| Address (Hex) | Address | Data |
|---------------|---------|------|
| 0DAC | 3500 | 29 |
| 0DAD | 3501 | 26 |
| 0DAE | 3502 | 25 |
| 0DAF | 3503 | 23 |
| 0DB0 | 3504 | 15 |
| 0DB1 | 3505 | 12 |
| 0DB2 | 3506 | 0 |
| 0DB3 | 3507 | 0 |
| 0DB4 | 3508 | 0 |
| 0DB5 | 3509 | 0 |
| 0DB6 | 3510 | 0 |
| 0DB7 | 3511 | 0 |
| 0DB8 | 3512 | 0 |
| 0DB9 | 3513 | 0 |

Line No Assembler Message

0 Program assembled successfully



Registers

| | |
|---------|-------|
| A | 21 |
| BC | 00 00 |
| DE | 00 00 |
| HL | 1F 46 |
| PSW | 00 00 |
| PC | 42 15 |
| SP | FF FF |
| Int-Reg | 00 |

Flag

| | |
|----|---|
| S | 0 |
| Z | 1 |
| AC | 0 |
| P | 1 |
| C | 0 |

Load me at

```
1 LXI H,8000
2 MOV C,M
3 XRA A
4 MOV B,A
5 LOOP: INX H
6 ADD M
7 JNC SKIP
8 INR B
9 SKIP: DCR C
10 JNZ LOOP
11 INX H
12 MOV M,A
13 INX H
14 MOV M,B
15 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

Simulator: Idle

Data Stack KeyPad Memory I/O Ports

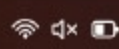
Start 8000

OK

| Address (Hex) | Address | Data |
|---------------|---------|------|
| 1F40 | 8000 | 4 |
| 1F41 | 8001 | 5 |
| 1F42 | 8002 | 7 |
| 1F43 | 8003 | 9 |
| 1F44 | 8004 | 12 |
| 1F45 | 8005 | 33 |
| 1F46 | 8006 | 0 |
| 1F47 | 8007 | 0 |
| 1F48 | 8008 | 0 |
| 1F49 | 8009 | 0 |
| 1F4A | 8010 | 0 |
| 1F4B | 8011 | 0 |
| 1F4C | 8012 | 0 |
| 1F4D | 8013 | 0 |

Line No Assembler Message

0 Program assembled successfully





Registers

| | |
|---------|-------|
| A | 00 |
| BC | 17 00 |
| DE | 00 00 |
| HL | 0D B1 |
| PSW | 00 00 |
| PC | 42 1E |
| SP | FF FF |
| Int-Reg | 00 |

Flag

| | |
|----|---|
| S | 0 |
| Z | 1 |
| AC | 0 |
| P | 1 |
| C | 0 |

Load me at

```
1  LOOP: LXI H, 3500
2  MVI D, 00
3  MVI C, 05
4  LOOP1: MOV A, M
5  INX H
6  CMP M
7  JC LOOP2
8  MOV B, M
9  MOV M, A
10 DCX H
11 MOV M, B
12 INX H
13 MVI D, 01
14 LOOP2: DCR C
15 JNZ LOOP1
16 MOV A, D
17 RRC
18 JC LOOP
19 HLT
20
```

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 3500

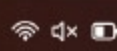
OK

| Address (Hex) | Address | Data |
|---------------|---------|------|
| 0DAC | 3500 | 12 |
| 0DAD | 3501 | 15 |
| 0DAE | 3502 | 23 |
| 0DAF | 3503 | 25 |
| 0DB0 | 3504 | 26 |
| 0DB1 | 3505 | 29 |
| 0DB2 | 3506 | 0 |
| 0DB3 | 3507 | 0 |
| 0DB4 | 3508 | 0 |
| 0DB5 | 3509 | 0 |
| 0DB6 | 3510 | 0 |
| 0DB7 | 3511 | 0 |
| 0DB8 | 3512 | 0 |
| 0DB9 | 3513 | 0 |

Line No Assembler Message

0 Program assembled successfully

Simulator: Idle





Registers

| | |
|---------|-------|
| A | 0C |
| BC | 00 00 |
| DE | 00 18 |
| HL | 08 07 |
| PSW | 00 00 |
| PC | 42 15 |
| SP | FF FF |
| Int-Reg | 00 |

Flag

| | |
|----|---|
| S | 0 |
| Z | 1 |
| AC | 0 |
| P | 1 |
| C | 1 |

Load me at

```
1 LXI H,2050
2 MOV C,M
3 DCR C
4 INX H
5 MOV A,M
6 LOOP1: INX H
7 CMP M
8 JC LOOP
9 MOV A,M
10 LOOP: DCR C
11 JNZ LOOP1
12 STA 2058
13 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 2050

OK

| Address (Hex) | Address | Data |
|---------------|---------|------|
| 0802 | 2050 | 5 |
| 0803 | 2051 | 16 |
| 0804 | 2052 | 32 |
| 0805 | 2053 | 12 |
| 0806 | 2054 | 14 |
| 0807 | 2055 | 18 |
| 0808 | 2056 | 0 |
| 0809 | 2057 | 0 |
| 080A | 2058 | 12 |
| 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

