



Registers

A	1B	
BC	2D	00
DE	00	00
HL	1F	42
PSW	00	00
PC	42	1D
SP	FF	FF
Int-Reg	00	

Flag

S	0
Z	1
AC	0
P	1
C	1

Decimal - Hex Conversion

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

I/O Ports

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

Memory

<input type="text" value="8004"/>	-	+	<input type="text" value="19"/>
<input type="button" value="Update Memory"/>			

Load me at

```
1  LXI  H,8000
2  MOV  C,M
3  DCR  C
4  LOOP3: MOV D,C
5  LXI  H,8001
6  LOOP2: MOV A,M
7  INX  H
8  CMP  M
9  JNC  LOOP1
10 MOV  B,M
11 MOV  M,A
12 DCX  H
13 MOV  M,B
14 INX  H
15 LOOP1: DCR D
16 JNZ  LOOP2
17 DCR  C
18 JNZ  LOOP3
19 HLT
20
```

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

Start

Address (Hex)	Address	Data
1F40	8000	4
1F41	8001	27
1F42	8002	13
1F43	8003	45
1F44	8004	19
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



Registers

A	1B
BC	2D 00
DE	00 00
HL	1F 42
PSW	00 00
PC	42 1D
SP	FF FF
Int-Reg	00

Flag

S	0
Z	1
AC	0
P	1
C	1

Load me at

```
1 LXI H,8000
2 MOV C,M
3 DCR C
4 LOOP3: MOV D,C
5 LXI H,8001
6 LOOP2: MOV A,M
7 INX H
8 CMP M
9 JNC LOOP1
10 MOV B,M
11 MOV M,A
12 DCX H
13 MOV M,B
14 INX H
15 LOOP1: DCR D
16 JNZ LOOP2
17 DCR C
18 JNZ LOOP3
19 HLT
20
```

Decimal - Hex Conversion

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

I/O Ports

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

Memory

<input type="text" value="8004"/>	-	+	<input type="text" value="0D"/>
<input type="button" value="Update Memory"/>			

Data Stack KeyPad Memory I/O Ports

Start

Address (Hex)	Address	Data
1F40	8000	4
1F41	8001	45
1F42	8002	27
1F43	8003	19
1F44	8004	13
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