











Assembly program listing and memory dump.

Assembly Listing:

```
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
```

Memory Dump:

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

Assembler Message:

Line No	Assembler Message
0	Program assembled successfully

File Run Assembler Debug Help

Registers

Register	Value	Flag
A	00	S 0
BC	05 00	Z 1
DE	00 20	AC 0
HL	00 23	F 1
PSW	00 00	C 0
PC	42 14	
SP	FF FF	
Int-Reg	00	

Decimal - Hex Conversion

Decimal: 0 Hex: 0

To Hex To Dec

I/O Ports

0 - + 00

Update Port Value

Memory

0 - + 00

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

Start 2050

Address (Hex)	Address	Data
0802	2050	45
0803	2051	0
0804	2052	35
0805	2053	0
0806	2054	10
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

QC

00 S 0

00 Z 0

00 AC 0

17 P 1

FF C 0

00

Hex Conversion

Hex

0

To Dec

ts

- + 00

Update Port Value

y

- + 00

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	7
0BEB	3051	9
0BEC	3052	16
0BED	3053	5
0BEE	3054	7
0BEF	3055	12
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