

**AIM:**

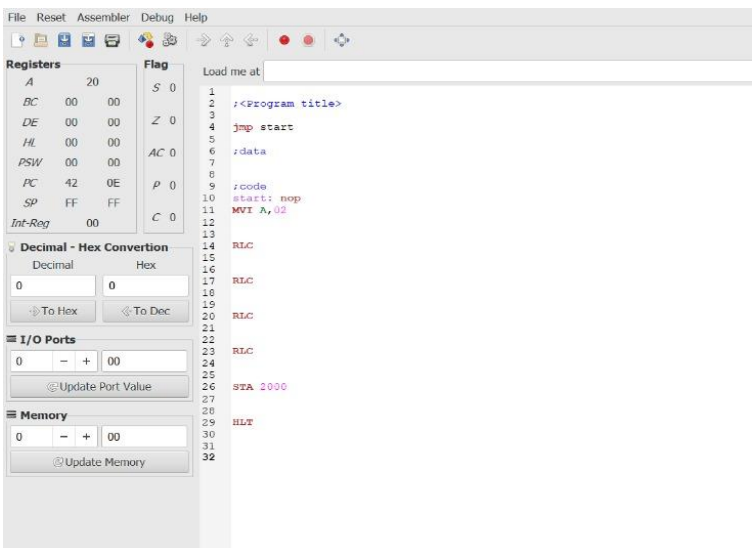
To compute rotation of given data in left without carry using 8085 processor.

**ALGORITHM:**

- 1) Load the base address of the array in HL register pair.
- 2) Move the data from memory location into accumulator.
- 3) Shift left the accumulator content for four times.
- 4) Store the result in the specified location.

**PROGRAM:**

```
MVI A,02  
RLC  
RLC  
RLC  
RLC  
STA 2000  
HLT
```

**INPUT:**

## OUTPUT:

The screenshot displays the 8085 processor simulator interface. The main window shows assembly code being entered line by line. The registers panel on the left shows the current state of the 8085 registers. The memory panel on the right shows the memory contents starting from address 2000. The I/O Ports panel shows the current port value. The Message window at the bottom shows the assembly status.

**Registers:**

Register	Value
A	20
BC	00 00
DE	00 00
HL	00 00
PSW	00 00
PC	42 0E
SP	FF FF
Int-Rpt	00

**Flags:**

Flag	Value
S	0
Z	0
AC	0
P	0
C	0

**Assembly Code:**

```
1 ;<Program title>
2
3
4 jmp start
5
6 ;data
7
8 ;code
9 start: nop
10
11 MVI A, 02
12
13
14 RLC
15
16
17 RLC
18
19
20 RLC
21
22
23 RLC
24
25
26 STA 2000
27
28
29
30
31
32 HLT
```

**Memory:**

Address (Hex)	Address	Data
0700	2000	32
0701	2001	0
0702	2002	0
0703	2003	0
0704	2004	0
0705	2005	0
0706	2006	0
0707	2007	0
0708	2008	0
0709	2009	0
070A	2010	0
070B	2011	0
070C	2012	0
070D	2013	0

**Message Window:**

Line No	Assembler Message
0	Program assembled successfully

## RESULT:

Thus the program was executed successfully using 8085 processor simulator.