

## **ROTATE LEFT OPERATION**

**EXP NO: 18**

### **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:

Start 2000

Address (Hex)	Address	Data
07D0	2000	

OUTPUT:

GNUSim8085 - 8085 Microprocessor Simulator

File Reset Assembler Debug Help

Registers

A	20	S	0
BC	00 00	Z	0
DE	00 00	AC	0
HL	00 00	P	0
PSW	00 00	C	0
PC	42 0E		
SP	FF FF		
Int-Reg	00		

Flag

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 ;<Program title>
2
3 jmp start
4
5 ;data
6
7
8
9 ;code
10 start: nop
11 MVI A,02
12 RLC
13 RLC
14 RLC
15 RLC
16 STA 2000
17 hlt
```

Start 2000 OK

Address (Hex)	Address	Data
07D0	2000	32
07D1	2001	0
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	0
07DB	2011	0
07DC	2012	0
07DD	2013	0

Line No Assembler Message

0 Program assembled successfully

Simulator: Idle

08:23 AM 18-10-2023

RESULT:

Thus the program was executed successfully using 8085 processor simulator.