

**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 a software simulator for the 8085 microprocessor. The interface is divided into several sections:

- Registers:** A table showing the state of various registers. The Accumulator (A) contains the value 20. The Program Counter (PC) is at 42. The Stack Pointer (SP) is at FF. Other registers like BC, DE, HL, PSW, and Int-Reg are also shown with their respective values.
- Flag:** A section showing the status of various flags. The Zero flag (Z) is set to 1, and the Carry flag (C) is set to 0.
- Assembly Code:** A list of instructions being executed:

```
1 MVI A,02
2 RLC
3 RLC
4 RLC
5 RLC
6 STA 2000
7 HLT
8
```
- Memory:** A table showing the contents of memory locations. The value 32 is stored at address 07D0, and zeros are stored at subsequent addresses up to 07DD.
- I/O Ports:** A section for monitoring and controlling I/O operations, including input, output, and port value updates.
- Assembler Message:** A log showing the message "Program assembled successfully" at line 0.

**RESULT:** Thus the program was executed successfully using 8085 processor simulator.