

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:

OUTPUT:

The screenshot displays the 8085 processor simulator interface. The main window is divided into several sections:

- Registers:** A table showing the current values of the 8085 registers. The PC (Program Counter) is 42, and the SP (Stack Pointer) is FF.
- Flags:** A section showing the status of the flags (S, Z, AC, P, C).
- Assembly Code:** A list of instructions entered for execution:

```
1 MVI A, 02
2 RLC
3 RLC
4 RLC
5 RLC
6 STA 2000
7 HLT
8
```
- Memory:** A table showing the memory contents starting from address 2000. The data at address 2000 is 32, and the data at address 2001 is 0.
- Decimal - Hex Conversion:** A section for converting between decimal and hexadecimal values.
- I/O Ports:** A section for updating port values.
- Memory:** A section for updating memory values.

The bottom status bar shows the message: "Program assembled successfully".

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