

## **ROTATE RIGHT OPERATION**

**EXP NO: 19**

### **AIM:**

To compute rotation of given data in right 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 right the accumulator content for four times left.
- 4) Store the result in the specified location.

**PROGRAM:**

MVI A,03

RRC

RRC

RRC

RRC

STA 2000

HLT

**INPUT:**

MVI A, 09

**OUTPUT:**

GNUSim8085 - 8085 Microprocessor Simulator

File Reset Assembler Debug Help

Registers

Register	Value	Flag
A	90	S 0
BC	00 00	Z 0
DE	00 00	AC 0
HL	00 00	P 0
PSW	00 00	C 1
PC	42 0E	
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  ;<Program title>
2
3
4  jmp start
5
6  ;data
7
8
9  ;code
10 start: nop
11 MVI A, 99
12
13 RRC
14
15 RRC
16
17 RRC
18
19 RRC
20
21 RRC
22
23 RRC
24
25 STA 2000
26
27 HLT
28
29
30
31
32
33
34 hlt

```

Start 2000 OK

Address (Hex)	Address	Data
07D0	2000	144
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

Line No Assembler Message

0 Program assembled successfully

Simulator: Idle

27°C Partly sunny

Search

ENG IN

08:45 18-10-2023

## RESULT:

Thus the program was executed successfully

using 8085 processor simulator.