## LAB3

## AIM: TO EXPLORE AND ANALYZE LOGICAL INSTRUCTIONS AND BRANCH INSTRUCTIONS IN 8085.

## PRACTICE ASSIGNMENT

1. Explore following logical instructions of 8085:

CMC (Complement the Carry Flag)

RLC (Rotate Accumulator Left)

RRC (Rotate Accumulator Right)

RAL (Rotate Accumulator Left through Carry)

RAR (Rotate Accumulator Right through Carry)

2. Explore following Branching instructions of 8085. JUMP (Unconditional and Conditional):

**JMP** 

JC JNC

JZ JNZ

## LAB ASSIGNMENT

- 1. Write an Assembly language program in 8085 to find whether the given number is even or odd. If the number is even, then store 01H at memory location 1110H, otherwise store 02H at the same location.
- 2. Write an Assembly Language Program to load the Hexadecimal Numbers 9BH and A7H in Registers D and E respectively, and add the numbers. If the Sum is greater than FFH, then display 01H at the memory location 1000H, otherwise display the sum.
- 3. Write an Assembly language program in 8085 to Count number of 1's of the content of the register D and store the count in the register C.

INPUT: DAH

OUTPUT: 5

4. Write an Assembly language program in 8085 to Move a block of 8 byte data stored from DF10H - DF17H to DF70H - DF77H.

8 Byte Block: 11,22,33,44,55,66,77,88

- 5. Write an Assembly program in 8085 to multiply a given number by 2 using Rotate instructions.
- 6. Explain which flags are/are not affected by Jump Instructions?