

## **SQUARE OF NUMBER**

**EXP NO: 16**

### **AIM:**

To compute square of number using 8085 processor.

### **ALGORITHM:**

- 1) Load the base address of the array in HL register pair.
- 2) Assign accumulator as 0.
- 3) Load the content of memory location specified into register.
- 4) Add content of memory location with accumulator and decrement register content by 01.
- 5) Check if register holds 00, if so store the value of accumulator in memory location.

### PROGRAM:

LXI  
H,8000

XRA  
A

MOV  
B,M

LOOP:  
ADD M

DCR  
B

JNZ  
LOOP

STA  
8001

HLT

### INPUT:

| Address (Hex) | Address | Data |
|---------------|---------|------|
| 1F40          | 8000    | 6    |

**OUTPUT:****RESULT:**

Thus the program was executed successfully using 8085 processor simulator.