# SAGARMATHA ENGINEERING COLLEGE

*(TU Affiliated)*

Sanepa, Lalitpur

**LAB NO:** 3

**A LAB REPORT ON**

IMPLEMENTATION OF BASIC INSTRUCTIONS TO WRITE PROGRAMS IN 8085


Submitted By

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**Department of Electronics and Computer Engineering**

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# MICROPROCESSOR LAB-03

## TITLE

IMPLEMENTATION OF BASIC INSTRUCTIONS TO WRITE PROGRAMS IN 8085

## Objective

- ✓ To be able to write simple programs in 8085.
- ✓ To be able to implement loops and table processing in 8085.

## Hardware/Software Required

- Computer with internet
- Sim8085 online simulator

## Problems

**Q1.** Complement the bits $D_6$ and $D_3$ of data at memory location 9000H (45H) and store the result at 9010H.

**Q2.** WAP that retrieves a data located at 9000H and store it to memory location 9010H if it is even else store it to location 9020H.

**Q3.** Sixteen bytes of data are stored in memory location at 9000H to 900FH. WAP to replace each data byte by FFH.

**Q4.** An eight-bit data is stored at 9000H. Transfer that data into location 9010H if its bit $D_6$ is 0 and bit $D_3$ is 1, else transfer FFH at 9020H.

**Q5.** Find the square of a number (*less than 0FH*) located at memory location 9000H, and store the result at 9010H.

**Q6.** Write a program to multiply 05H and 03H and store the result at 9000H.


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## MICROPROCESSOR LAB-03

### Problems

**Q7.** Transfer 10 bytes of data starting from 9000H to starting from 9010H if the data is greater than 20H else store 00H.

**Q8.** There are 10-bytes of data stored in memory location starting from 9000H. WAP to count the number of one in each byte and store the count in the corresponding table starting from memory location 9010H.

### Result

Hence, all the given problems are solved, and the results are verified.