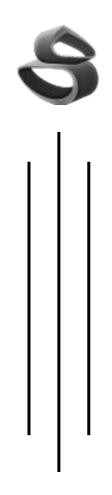
# SAGARMATHA ENGINEERING COLLEGE

(TU Affiliated)

Sanepa, Lalitpur



**LAB NO:** 6

#### A LAB REPORT ON

EXECUTION OF 8085 PROGRAM IN 8085 TRAINER KIT (HARDWARE).

Submitted By	Submitted To
Name:	Department of Electronics and Computer Engineering
Faculty/Year:	Signature:
Roll No.:	Date:
Date:	Date

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# MICROPROCESSOR LAB-06

# TITLE

SIMULATION OF 8085 PROGRAM IN 8085 TRAINER KIT (HARDWARE).

# Objective

✓ To be able to run simple programs in 8085 trainer kit.

#### Execution using trainer kit (with manual assembling)

;Assume [6050H]=96H **LDA** 6050H **CMA STA** 6051H RST 1 HLT

Address	Value	Remarks	
6050H	96H	Manually loaded content	
6000H		Op-code of LDA instruction	
6001H			
6002H			
6003H			
6004H			
6005H			
6006H			
6007H			
6008H			
6051H			

#### MICROPROCESSOR LAB-06

#### Procedure

- 1. To see/change/load data/program (using manual assembling) to the memory or register
  - a. COMMAND = (S)
  - b. SUBSTUT? (enter)
    - i. Memory (enter)
      - 1. Enter the memory address (Eg. 6000H) to see/change
    - ii. Register
      - 1. Enter the name of the register to examine/alter
    - iii. I/O
- 2. Steps to write a code using (using inbuilt assembler):
  - a. (E) to expand
  - b. (A) to select 2 pass assembler
  - c. (enter) 3 times
  - d. File exists (N)
  - e. Are you sure? (enter)
  - f. RT

C = (W) to write the code

0001: ORG 6000H

0002: MVI A, 32H

•••

... RST 1

**00..: HLT** (to represent the end of the code)

**Ctrl** + **C** to get out from write mode

g. RT

C = (A) to assemble the code

Save to DSTN (Y/N)? Y (enter)

- 3. To execute the code
  - a. Get back to the starting screen (press **Esc**, **Esc**, **Esc**)
  - b. Command =  $\mathbf{G}$
  - c. GOTO? (enter)
    - i. BUSRT (enter)
    - ii. Single step
    - iii. Break point
      - 1. ADDR **6000** (enter) (Assuming 6000 is the starting address of the code)

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#### MICROPROCESSOR LAB-06

#### **Problems**

Execution using trainer kit (with inbuilt 2-pass assembler)

**Q1.** Assemble the following program and observe the output.

```
ORG 6000H
      LXI SP, 60FFH
      CALL L1
      MOV B, A
      RST 1
      HLT
L1:
      INR A
      RET
```

Address/Register	Previous Value	After Execution	Remarks
60FDH			
60FEH			
A			
В			

Q2. WAP to add upper and lower nibble of a data stored at 7000H, and store the final result at 7050H.

#### Result

Hence, all the given programs are executed and the results are verified.