ASIAN COLLEGE OF HIGHER STUDIES

ACHS

COLLEGE OF IT AND COMPUTER SCIENCE

LAB REPORT COVER PAGE

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Initial Submission Date: ..... August 4 .....

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Course Name: Microprocessor

Course Code: CSC167

Semester: 2nd

Instructor/Examiner/Lecture: Bhuwan Acharya

Evaluator's Comment:

Evaluator's Signature: .....

Objectives :-

→ To demonstrate the basic understanding of assembly language programming using the 8085 microprocessor simulator.

→ To perform data exchange between two memory locations and data movement within memory

→ To observe the changes in various flags during data movement.

write a small program to enter data to accumulator and move it to all registers.

```
LXI H,2200H
MOV A,M
MOV B,A
MOV C,A
MOV D,A
MOV E,A
MOV H,A
MOV L,A
HLT
```

write a program to exchange the content of memory location 1000H and 2000H

```
LDA 2200H
MOV B,A
LDA 2201H
STA 2200H
MOV A,B
STA 2201H
HLT
```

WAP to move 4 bytes of data from starting from 2200H to 2204H using simulator and observe the value of different flags.

```
LXI H, 2200H
MVI D, 04H
LXI B, 2204H
J1: MOV A, M
STAX B
INX H
INH B
DCR D
JNZ J1
HLT
```

Zero flag(z): The zero flag will be affected based on the data being moved. If the accumulator (A) contains a zero after the mov A, m instruction, the zero flag will be set(1); otherwise it will be cleared(0).

Sign Flag(S): The sign flag will be affected based on the most significant bit (bit 7) of the data in the accumulator(A) after the mov A, M instruction. If bit 7 is set(1), indicating a negative result, the sign flag will be set(1); otherwise, it will be cleared(0).

Parity Flag(P): The parity flag will be affected based on the data in the accumulator(A) after the mov A, m instruction. If the accumulator contains an even number of 1 bit, the Parity Falg will be set(1); otherwise, it will be cleared(0).

Conclusion:-

Through these lab exercises, we have achieved the objectives of learning basic assembly language programming for the 8085 microprocessor simulator. we sullessfully exchanged data between two memory locations, moved data within memory and observed the changes in different flags during data movement. These exercises have provided a hands-on experience with the 8085 microprocessor simulator, helping to reinforce the understanding of fundamental concepts of assembly language programming.

which data you move ?

flag condition ?

You just copy !

If you repeat same next time ; will reject your work.