INSTITUTE OF ENGINEERING & TECHNOLOGY

MOHANLAL SUKHADIA UNIVERSITY, UDAIPUR

(RAJ.)

DEPARTMENT OF COMPUTER SCIENCE ENGINEERING
B. Tech - IV SEMESTER

Session 2022-23

Microprocessor & Interfaces Lab
LABORATORY MANUAL

BT4CS07-CP01

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S. No.	Name of Experiment	Date of Perform	Checked on.	Signature and Remarks.
1.	Place 05H in register B			
2.	Get 08 in register A; then move it to register B			
3.	Load the content of memory location 2050H directly to the accumulator, then transfer it to register B. The content of memory location 2050H is 05H			
4.	Move the content of memory location 2150H to register H. The content of memory location 2150H is 1AH			
5.	Place the content of memory location 2150H to register B and that of memory location 2151H in register C. The content of memory location 2150H is 11H and 2151H is 12H respectively			
6.	Place 09H in accumulator Increment it by oneand store the result in memory location 2500H			
7.	Add two 8 bit numbers whose sum is also 8 bit. Numbers are 49H & 56H			
8.	Subtract two 8 bit numbers whose difference isalso 8 bit. Numbers are 49H & 32HH			

Experiment – 1

Experiment Name - Place 05H in register B. Date:-

Memory Location in Hex.	Instruction Mnemonics Opcode Operand	Hex Code &Binary Code	//Comments
2001	MVI B,05H	06,05	
2002	HLT	76	

Practical performed on- GNUSim8085

Experiment – 2

Experiment Name- Get 08 in register A; then move it to register B.

Memory Location in Hex.	Instruction Mnemonics Opcode Operand	Hex Code & Binary Code	//Comments
2050	MVI A,08H	3E,08H	
2051	MOVB,A	47	
2052	HLT.	76	

Practical performed on:- GNUSim8085

Experiment – 3

Experiment Name- Load the content of memory location 2050H directly to the accumulator, then transfer it to Register B. The content of memory location 2050H is 05H.

Memory Location in Hex.	Instruction Mnemonics Opcode Operand	Hex Code & Binary Code	//Comments
2001	LDA 2050H	3A,50,20	
2004	MOV B,A	47	
2005	HLT.	76	

Practical performed on:- GNUSim8085

Experiment – 4

Experiment Name- Move the content of memory location 2150H to register H.The content of memory location 2150H is 1AH.

Memory Location in Hex.	Instruction Mnemonics Opcode Operand	Hex Code & Binary Code	//Comments
FC00	LXI H,2150H	21,50,21	
FC03	MOV C,M	4E	
FC04	HLT.	76	

Practical performed on:- GNUSim8085

Experiment – 5

Experiment Name - Place the content of memory location 2150H to register B and that of memory location 2151H in register C. The content of memory location 2150H is 11H and 2151His 12H respectively.

Memory Location in Hex.	Instruction Mnemonics Opcode Operand	Hex Code & Binary Code	//Comments
FC00	LXI H,2150H	21,50,21	
FC03	MOV B,M	46	
FC04	INX H	23	
FC05	MOV C,M	4E	
FC06	HLT	76	

Practical performed on:- GNUSim8085

Experiment – 6

Experiment Name - Place 09H in accumulator.Increment it by one and store the result inmemory location 2500H.

Memory Location in Hex.	Instruction Mnemonics		Hex Code & Binary Code	//Comments
	Opcode	Operand		
FC00	MVI	A,09H	3E,09H	
FC02	INR	A	3C	
FC03	STA	2500H	32,00,25	
FC06	HLT.		76	

Practical performed on:- GNUSim8085

Experiment – 7

Experiment Name- Add two 8 bit numbers. whose sum is also 8 bit. Numbers are 49H & 56H.

Memory Location inHex.	Instruction Mnemonics		Hex Code & Binary Code	//Comments
	Opcode	Operand		
2000	LXI	H,2501	21,01,25	
2003	MOV	A,M	7E	
2004	INX	H	23	
2005	ADD	M	86	
2006	STA	2503H	32,03,25	
2009	HLT.		76	

Practical performed on:- GNUSim8085

Experiment – 8

Experiment Name- Subtract two 8 bit numbers whose difference is also 8 bit. Numbers are49H & 32HH.

Memory Location inHex.	Instruction Mnemonics		Hex Code & Binary Code	//Comments
	Opcode	Operand		
2000	LXI	H,2501	21,01,25	
2003	MOV	A,M	7E	
2004	INX	H	23	
2005	SUB	M	96	
2006	INX	H	23	
2007	MOV	M,A	77	
2008	HLT.		76	

Practical performed on:- GNUSim8085