Experiment Number -02

PEE-452/PCS-405 Microprocessors Lab
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OBJECT

Addition of two 8-bit hexadecimal numbers

APPRATUS REQUIRED

8085 Microprocessor trainer kit, Keyboard

THEORY

The Intel 8085 is an 8-bit microprocessor produced by Intel and introduced in 1976. It is a software-binary compatible with the more-famous Intel 8080 with only two minor instructions added to support its added interrupt and serial input/output features. However, it requires less support circuitry, allowing simpler and less expensive microcomputer systems to be built.

In Enter Program into Trainer Kit

1. Press 'RESET' key
2. Sub (key processor represent address field)
3. Enter the address (16 bit) and digit in hex
4. Press 'NEXT' key
5. Enter the data
6. Again press "NEXT"
7. Again after taking the program, are use HLT instruction its Hex code
8. Press "NEXT"

How to executive program

1. Press "RESET"
2. Press "GO"
3. Enter the address location in which line program was executed
4. Press "Execute" key

Er. Yadvendra Sharan Notes

PROGRAM

Memory Address	*Machine Codes*	*Labels*	*Mnemonics*	*Operands*	*Comments*
2000	21		LXI	H,2501H	
2001	01				
2002	25				
2003	7E		MOV	A, M	
2004	23		INX	H	
2005	86		ADD	M	
2006	23		INX	H	
2007	77		MOV	M, A	
2008	EF		RST	5	

OBSERVAVTION

Before Execution	**After Execution**
Data: Address Data 2009- 200A-	Result: Address Data 200B-

RESULT

Thus hexadecimal addition for 8-bit sum is performed successfully by using 8085 trainer kit successfully.

PRECAUTIONS

1. Connections should be proper and tight.
2. Switch "ON" the power after completing the circuit.
3. Do not touch the line terminals.

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