

D.O.E: 16/04/2019

Experiment No: 9(a)

WAP for addition of 2 8 bit numbers.

Memory location	Instruction	Comment
9000 _H	MOV A, #29 _H	Move the 8 bit no. 29 _H to accumulator.
9002 _H	MOV R1, #02 _H	Move the 8 bit no. 02 _H to register.
9004 _H	ADD A, R1	Add the register content with accumulator.

Result:

Input:

<u>Register</u>	<u>Data</u>
A	29 _H
R1	02 _H

Output in accumulator^A = 2B_H

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D.O.S: 24/04/19

Experiment No: 9(b)

WAP for subtraction of 2 8 bit numbers.

Memory Location	Instruction	Comment
9000H	MOV A, #29H	Move the 8 bit number 29H to accumulator A.
9002H	MOV R1, 02H	Move the number 02H to register R1.
9004H	SUBB A, R1	Subtract the content of accumulator from R1.

Result:

Input

Register
A
R1

Data
29H
02H

Output in Accumulator = 27H

Experiment No: 9(c)

WAP to perform XOR operation on 2 8bit numbers.

Memory Location	Instruction	Comment
9000H	MOV A, #29H	Move the 8 bit number 29H to accumulator A.
9002H	MOV R1, #02H	Move the 8 bit number 02H to R1.
9004H	XRL A, R1	Perform XOR on A and R1.

Result:

Input:

<u>Register</u>	<u>Data</u>
A	29H
R1	02H

Output:

<u>Register</u>	<u>Data</u>
A	2BH

Experiment No: 9(d)

WAP to perform OR operation on 2 8 bit numbers.

Memory Location	Instruction	Comment
9000H	MOV A, #29H	Move the 8 bit no, 29H to accumulator A.
9002H	MOV R1, #02H	Move the 8 bit no. 02H to R1.
9004H	ORL A, R1	Perform OR operation on A and R1.

Result:

Input:

<u>Register</u>	<u>Data</u>
A	29H
R1	02H

Output from accumulator, A = 2BH

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Experiment No. 1

WAP to perform AND operation on 2 8bit numbers.

Memory Location	Instruction	Comments
9000H	MOVA, #29H	Move the 8bit number to accumulator, A.
9002H	MOVR, #02H	Move the 8bit number, 02H to R ₁ .
9004H	ANL A, R ₁	Perform AND on A and R ₁ .

Result:Input:RegisterData

29H

A

02H

R₁Output from accumulator A = 00H

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D.O.S: 22/04/19

Experiment No: 9(f)

WAP to perform NOT operation of a 8 bit no.

Memory Location	Instruction	Comments
9000H	MOV A, #02H	Move the 8 bit no. to accumulator A.
9002H	CPL A	Perform NOT operation on accumulator.

Result:

Input:

Register
A

Data
02H

Output:

Register
A

Data
FDH