Experiment No: 2(4)

write a program to add two 16-bit number from memory and after the addition. Store the number in memory.

	1	
Memory	Instruction	Comments
2000H	MOV ST, 2000H	more the address 6000H to SI.
2003 H	MOV AX, [SI]	More the content of SI to AX.
200541	INC SI	SI is incremented by 1.
20064	INICSI	SI is incremented by 1.
2007H	ADD AX [S]	Addition between the content
		of the accumulator and
		content of SI and storing the result in accumulator.
2009H	INCSI	SI is incremented by 1.
200 AH	INCSI	SI is incremented by 1.
200 BH	MOVEST, AX	More content of Ax to SI.
200 DH	INT OBH	END OF PROGRAM

RESULT:

Input

Memory Location 3000H 3002H

Data 8 E 69# D002#

Output

Memory Location BOOGH Register AX

Data 5E6BH

Data 3182H D.O.E: 12/02/2019

0.05:05/03/2019

Experiment No: 2(B)

Write a program to subtract 2 16-bit number from memory and after the subtraction store the number in memory.

	11. 1071		
	Location	Instruction	Comments
	2000H	MOV SI, 3000H	More the address 30004 to SI.
	20034	MOV AX, [S]	More the content of SI to AX.
	2005H	INC SI	SI is incremented by 1.
1	2006H	INCSI	8I is incremented by 1.
-	200 FH	SUB AX, ISIJ	Subtraction between the contout of
-			Subtraction between the content of the accumulator and content of 17 and storing the result in accumulator.
-	2009H	INC SI	SI is incremented by 1.
	200AH	INC SI	8I is incremented by 1.
	200BH	MOVEST, AX	More the content of AX 60 SI.
	2000 H	INTO3H	END OF PROGRAM
8	ESULT:		NUGRAM

IMPUT

Memory Location Data 8E69H 3000H 3002H D002H

Memory Location 3004H Dala BE67#

D.O.E: 12/02/2019 Experiment No: 2(c) 0.0.5:05/08/2019 write a program to multiply 2 16-bit number from memory and store the result in memory. Instruction Location Comments MOVSI, 3000 H 2000H Move the address 3000H to SI. MOV AX, [SI] 2003H Move the content of SI to accumulator AX. 200 SH INCSP SI is incremented by 1. 2006H INCSI SI is incremented by 1. 2007H AND AX, ESI] Multiply the content of SI with the Content of accumulator and store the 2009H IMC SI SI is incremented by 1. 200A H INC SI SI is incremented by 1. 2008 MOV [SI], AX More the content of Ax to SI. 20004 INT O3H END OF PROGRAM RESULT : Input Memory Location Date 30004 8E69H 3002H D002+1 Output Memory Location 3004H 8000H

D.O.S:05/03/2019

Experiment No:2(0)

Write a program to perform DR operation between 2 16-6it number from memory and store the result in memory.

Memory	Instruction	Comments
200041	MOV ST, 3000H	More the address 3000H & SI.
20034	MOV AX, [SI]	More the content of SI to AX
20054	INC SI	8I is incremented by 1.
2006H	INC SI	SI is incremented by 1.
200FH	OR AX, [S]]	Postorm OR operation between the content of SI and content of accumulator and store it in accumulator.
20094	INC SI	SI in incremented by 1.
200AH	INC SI	SI is incremented by 1.
200BH	XA, [I2] VON	More the content of Ax to SI.
200DH	INTOBH	END OF PROGRAM.
0		

RESULT :

IMPUT

Memory Location 3000H 3002H Dala 8E69H D002H

Dutput Memory Location 2004H

Dala DEGBH D.O.E: 12/02/2019 D.O.S: 05/08/2019 Experiment No: 2(E) Write a program to perform XOR operation between 2-16 bit number from memory and store the result in memory. Memory Instruction location Comments MOV SI, BOODH 2000H More the address 3000 H to SI. MOV AX, [SI] 20034 More the content of SI to AX. INC SI 2005H SI is incremented by 1. INC CI 2006H SI is incremented by 1. XOR AX, [SI] 2007H Performe XOR operation between the Content of accumulator and content of SI and store the rescult in accumulator Ax. 2009H INCSI SI is incremented by 1. 200AH INCSI SI is incremented by 1. 200B# More the content of AX to SI MOVESIJ, AX 200 DH END OF PROGRAM INT 0341 RESULT: Memory Location Data 8E69H 3000H D002+1 2002H Dala 5 E6BH 30044

	The state of the s	CXP	esiment Mo: 2(F)			
Write a program to perform NOT operation between 2 munber from memory and store the result in memory						
	Memory Location	Instruction	Comments			
	2000H	MOV SI, 30004	More the address 30004 to SI.			
	20034	MOV AX, [SI]	More the content of SI to accumulatos.			
	2005#	NOT AX	Postorm Not operation on the content of accumulator and store the result in accumulator.			
竹	2006н	INCSI	SI is incremented by 1.			
	2007H	INC SI	SI is incremented by 1.	-		
	2008H	MOVESIJ, AX	more the content of AX to SI.			
	200AH	INT 034	END OF PROGRAM.			
	RESULT :	40				
Input: Memory Location Bala BE69H						
	Output: Memory Location Data 71964					
	Gno	lusion :-				