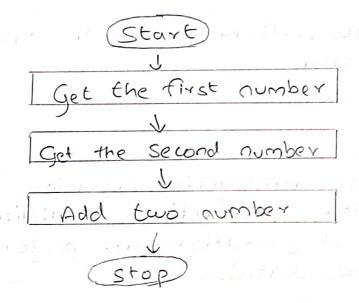


(9)

	Experiment No 2 Date:
	Roll No: 5077
	Die To souface suitematic acception on 16 lit
	Aim: To perform arithmetic operation on 16 bit
	Theory:
	Order arithmetic operation 8086, provider
	addition, subtraction, multiplication and division There all operations are performed on the
	operand (data)
J	Addition
	ADD - Add byte or word: - This instruction adds a number from source
	and puts the result to specific destination.
0	
	Program: Addition of two 16 bit numbers
	Algorithm
	Stepl: Initialize the data segment
	Step2: Get the First number in AL register
	Step 3: get the Second number in BL register
	Step4: Add the two numbers
	step 5: Display result
<u> Jundaram</u>	Step 6: Stop FOR EDUCATIONAL USE
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"	

-> flowchart



-> Output

c:>> tasm Filename asm C: > Clink filename . obj silocolists filename / flores de 0004

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10)

	·model small
	· data
	a dw 0002H
	b dw 0002H
	- Code
	Mou ax, @clata
	MOV 92, 0x
	Mou ax, a
(f)	Mou bx, b
	Add ax, bx
	Mov ch, 04H
	Mov Cl, 0417
	Mou bx, ax
	72: rol bh.cl
	mov al, bh
	and dl, OFH
	cmp d1,09
	ibe 14
	add d1,07
	I4: add d1,30H
,	Mor ah, O2H
	int 21H
	decch
	jn2 12
	Mou ah, 4CH
	int 21H
	End
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- Flowchart

Get the first number

Ciet the second number

Subtract two number

Stop

-> Output

C: >> tasm file name lasm

c: >> tink filename lobj

c: >> Filename

0000

1455 81 21

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	2]	Subtraction
		SUB - Sub byte or word - This instruction subtract a number from source to number from destination and puts the result to specific destination
•	7	Mnemonic: SUB Destination, Source SUB Operand 1, Operand 2
·		Program: Subtraction of two numbers (16 bit)
		Algorithm
•		Step 1: Initialize the data Segment Step 2: Get the first number in Ax register Step 3: Get the Second number in Bx register Step 4: Subtract the two number Step 5: Display result Step 6: Stop
	->	· model small
		a du 0002H
		b dw 0002H . (Ode
		Mov ax, Qdata Mov dx, ax
Sund	daram)	FOR EDUCATIONAL USE
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	Mov ax, a
	Mov bx, b
	Sub ax, bx
	Mov Ch, O4H
	Mov C1, 04 H
yer a second	I2: rol bx.cl
	Mov dl, bb
	And dl, of H
	cmp d1,09
	jbe I4 Sub dl, 07H
	74: Sub al, 30H
14.50	Mov ab, D2H
	dec ch
	jaz 72
	Mov ah, 4ch
	int 21 H end
•	EVIC
	(maderica: Henre up performed arithmetic
¥1	Conclusion: Hence, ux performed asithmetic operation on 16 bit data
	Office Control on the pictory
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<u>Sundaram</u>