

PRACTICAL – 9

AIM:

Subtract Two 32-bit numbers stored in consecutive memory locations and store the result in memory locations starting from 7000H

CODE:

ORG 100H

MOV [7000H], 7615H

MOV [7002H], 1495H

MOV [7004H], 1515H

MOV [7006H], 1313H

MOV AX, [7000H]

MOV BX, [7002H]

MOV CX, [7004H]

MOV DX, [7006H]

SUB AX,CX

SUB BX,DX

MOV [7008H], AX

MOV [7010H], BX

RET

OUTPUT:

emulator: Practical-9.com_

file math debug view external virtual devices virtual drive help

Load reload step back single step run step delay ms: 0

registers

	H	L
AX	00	00
BX	00	00
CX	00	33
DX	00	00
CS	0700	
IP	0100	
SS	0700	
SP	FFFE	
BP	0000	
SI	0000	
DI	0000	
DS	0700	
ES	0700	

0700:0100 0700:0100


07100: C7 199 ||	MOV w.[07000h], 07615h
07101: 06 006 ♣	MOV w.[07002h], 01495h
07102: 00 000 NULL	MOV w.[07004h], 01515h
07103: 70 112 p	MOV w.[07006h], 01313h
07104: 15 021 §	MOV AX, [07000h]
07105: 76 118 v	MOV BX, [07002h]
07106: C7 199 ||	MOV CX, [07004h]
07107: 06 006 ♣	MOV DX, [07006h]
07108: 02 002 0	SUB AX, CX
07109: 70 112 p	SUB BX, DX
0710A: 95 149 o	MOV [07008h], AX
0710B: 14 020 ¶	MOV [07010h], BX
0710C: C7 199 ||	RET
0710D: 06 006 ♣	NOP
0710E: 04 004 ♦	NOP
0710F: 70 112 p	NOP
07110: 15 021 §	NOP
07111: 15 021 §	NOP
07112: C7 199 ||	NOP
07113: 06 006 ♣	NOP
07114: 06 006 ♣	NOP
07115: 70 112 p	...

screen source reset aux vars debug stack flags

Random Access Memory

0700:7008 update table list

0700:7008	00 61 00 00 00 00 00 00-82 01 00 00 00 00 00 00	.a.....é@.....
0700:7018	00 00 00 00 00 00 00 00-00 00 00 00 00 00 00	.....
0700:7028	00 00 00 00 00 00 00 00-00 00 00 00 00 00 00	.....
0700:7038	00 00 00 00 00 00 00 00-00 00 00 00 00 00 00	.....
0700:7048	00 00 00 00 00 00 00 00-00 00 00 00 00 00 00	.....
0700:7058	00 00 00 00 00 00 00 00-00 00 00 00 00 00 00	.....
0700:7068	00 00 00 00 00 00 00 00-00 00 00 00 00 00 00	.....
0700:7078	00 00 00 00 00 00 00 00-00 00 00 00 00 00 00	.....

 Random Access Memory

☒ table
 ☐ list

0700:7010	82	01	00	00	00	00	00	00	00-00	00	00	00	00	00	00	00	00	é@.....
0700:7020	00	00	00	00	00	00	00	00	00-00	00	00	00	00	00	00	00	00	.....
0700:7030	00	00	00	00	00	00	00	00	00-00	00	00	00	00	00	00	00	00	.....
0700:7040	00	00	00	00	00	00	00	00	00-00	00	00	00	00	00	00	00	00	.....
0700:7050	00	00	00	00	00	00	00	00	00-00	00	00	00	00	00	00	00	00	.....
0700:7060	00	00	00	00	00	00	00	00	00-00	00	00	00	00	00	00	00	00	.....
0700:7070	00	00	00	00	00	00	00	00	00-00	00	00	00	00	00	00	00	00	.....
0700:7080	00	00	00	00	00	00	00	00	00-00	00	00	00	00	00	00	00	00	.....

CONCLUSION: In this practical we learnt how to subtract two 32 bit number in consecutive memory location.