

Terna Engineering College
Computer Engineering Department

Program: Sem V

Course: Microprocessor Lab

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PRACTICE EXAMPLE

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Class: TE-Comps B	Batch: B3
Date of Experiment: 10/11/2020	Date of Submission: 10/11/2020

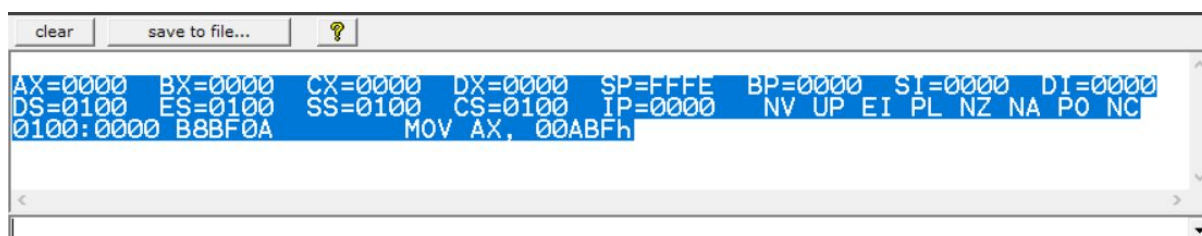
→ Aim:

Write a Program to perform multi-byte subtraction.

→ Input:

```
MOV AX, 0ABFH
MOV SI, 2000H
MOV DI, 3000H
MOV BX, 2008H
MOV CL, 04H
UP: MOV AL, [SI]
    SUB AL, [BX]
    MOV [DI], AL
    INC SI
    INC BX
    INC DI
    DEC CL
    JNZ UP
HLT
```

→ Output:



The screenshot shows a window with a title bar containing 'clear', 'save to file...', and a help icon. The main area displays the following text:

```
AX=0000 BX=0000 CX=0000 DX=0000 SP=FFFE BP=0000 SI=0000 DI=0000
DS=0100 ES=0100 SS=0100 CS=0100 IP=0000 NV UP EI PL NZ NA PO NC
0100:0000 B8BF0A      MOV AX, 00ABFh
```

clear
save to file...
?

DS=0100 ES=0100 SS=0100 CS=0100 IP=001B NV UP EI PL ZR NA PE NC
0100:001B F4 HLT

AX=0A00 BX=200C CX=0000 DX=0000 SP=FFFE BP=0000 SI=2004 DI=3004
DS=0100 ES=0100 SS=0100 CS=0100 IP=001B NV UP EI PL ZR NA PE NC
0100:001B F4 HLT

registers

H

L

AX

0A

00

BX

20

0C

CX

00

00

DX

00

00

CS

0100

IP

001B

SS

0100

SP

FFFE

BP

0000

SI

2004

DI

3004

DS

0100

ES

0100

0100:001B

0100E: 8A 138

0100F: 04 004

01010: 2A 042

01011: 07 007

01012: 88 136

01013: 05 005

01014: 46 070

01015: 43 067

01016: 47 071

01017: FE 254

01018: C9 201

01019: 75 117

0101A: F3 243

0101B: F4 244

0101C: 90 144

0101D: 90 144

0100:001B

MOV AX, 00ABFh

MOV SI, 02000h

MOV DI, 03000h

MOV BX, 02008h

MOV CL, 04h

MOV AL, [SI]

SUB AL, [BX]

MOV [DI], AL

INC SI

INC BX

INC DI

DEC CL

JNE 0Eh

HLT

NOP

...

screen

source

reset

aux

vars

debug

stack

flags