

Lab: 03



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2.5 Writing a Program using the FLAT Memory Model

The following program adds and subtracts integers. You may open it using any text editor.

```
TITLE Add and Subtract    (addsub.asm)
; This program adds and subtracts integers

.686
.MODEL flat, stdcall
.STACK

INCLUDE Irvine32.inc
.code
main PROC
    mov eax, 60000h ; EAX = 60000h
    add eax, 80000h ; EAX = EAX + 80000h
    sub eax, 20000h ; EAX = EAX - 20000h
    exit
main ENDP
END
main
```

2.5.1 Lab Work: Guessing the Value of the EAX Register

The constant values **60000h**, **80000h**, and **20000h** are in hexadecimal. Guess and write the values of the EAX register in the above program after the **add** and **sub** (subtract) instructions:

Value of EAX in hexadecimal after add = E00000h
Value of EAX in hexadecimal after sub = C00000h