

Source File: lab10.asm
Input: none
Output: Standard Output
Value: 1

Modify the example assembly language program used in class to compute

$$1000_{16} + 1000_8 + 1000_2 + 1000_{10}$$

Use only the `eax` register and use immediate operands for the addends. Show the contents of the registers after each step in the calculation. Your program should adhere to ordinary rules of algebraic precedence and associativity. Add an identification section as shown below to the top of your source file.

```

; Your name
; CS 3304
; Lab 10

```

A sample execution sequence is shown in Figure 1. To use the `Makefile` as distributed in class, add a target of `lab10` to `targetsAsmLanguage`.

```

1  newuser@csunix ~/3304/10> make
2  nasm -f elf32 -l lab10.lst -o lab10.o lab10.asm -I/usr/local/3304/include/ -I.
3  ld -m elf_i386 --dynamic-linker /lib/ld-linux.so.2 -o lab10 lab10.o \
4  /usr/local/3304/src/Along32.o -lc
5  newuser@csunix ~/3304/10> ./lab10
6
7  EAX=00000000 EBX=F7733FBC ECX=F772DBBF EDX=F7721480
8  ESI=FFB2050C EDI=080481B0 EBP=00000000 ESP=FFB20500
9  EIP=080481B5 EFL=00000282 CF=0 SF=1 ZF=0 OF=0 AF=0 PF=0
10
11
12  EAX=00001000 EBX=F7733FBC ECX=F772DBBF EDX=F7721480
13  ESI=FFB2050C EDI=080481B0 EBP=00000000 ESP=FFB20500
14  EIP=080481BF EFL=00000282 CF=0 SF=1 ZF=0 OF=0 AF=0 PF=0
15
16
17  EAX=00001200 EBX=F7733FBC ECX=F772DBBF EDX=F7721480
18  ESI=FFB2050C EDI=080481B0 EBP=00000000 ESP=FFB20500
19  EIP=080481C9 EFL=00000206 CF=0 SF=0 ZF=0 OF=0 AF=0 PF=1
20
21
22  EAX=00001208 EBX=F7733FBC ECX=F772DBBF EDX=F7721480
23  ESI=FFB2050C EDI=080481B0 EBP=00000000 ESP=FFB20500
24  EIP=080481D1 EFL=00000202 CF=0 SF=0 ZF=0 OF=0 AF=0 PF=0
25
26
27  EAX=000015F0 EBX=F7733FBC ECX=F772DBBF EDX=F7721480
28  ESI=FFB2050C EDI=080481B0 EBP=00000000 ESP=FFB20500
29  EIP=080481DB EFL=00000216 CF=0 SF=0 ZF=0 OF=0 AF=1 PF=1
30
31  newuser@csunix ~/3304/10>

```

Figure 1. Commands to Assemble, Link, & Run Lab 10