

# Assignment 2

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file *
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ashu@ashu:~/Documents/CDAC/eos$ cd airthmatic/
ashu@ashu:~/Documents/CDAC/eos/airthmatic$ file *
add.c:      ASCII text
add.o:      ELF 64-bit LSB relocatable, x86-64, version 1 (SYSV), not stripped
main.c:     C source, ASCII text
main.o:     ELF 64-bit LSB relocatable, x86-64, version 1 (SYSV), not stripped
Makefile:   ASCII text
projbin:    ELF 64-bit LSB shared object, x86-64, version 1 (SYSV), dynamically linked, inter
not stripped
sub.c:      ASCII text
sub.o:      ELF 64-bit LSB relocatable, x86-64, version 1 (SYSV), not stripped
ashu@ashu:~/Documents/CDAC/eos/airthmatic$
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objdump -S add.o
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ashu@ashu:~/Documents/CDAC/eos/airthmatic$ objdump -S add.o

add.o:      file format elf64-x86-64

Disassembly of section .text:

0000000000000000 <add>:
   0:  f3 0f 1e fa          endbr64
   4:  55                  push    %rbp
   5:  48 89 e5            mov     %rsp,%rbp
   8:  89 7d fc            mov     %edi,-0x4(%rbp)
  b:  89 75 f8            mov     %esi,-0x8(%rbp)
  e:  8b 55 fc            mov     -0x4(%rbp),%edx
 11:  8b 45 f8            mov     -0x8(%rbp),%eax
 14:  01 d0              add     %edx,%eax
 16:  5d                  pop     %rbp
 17:  c3                  retq
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objdump -S main.o
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ashu@ashu:~/Documents/CDAC/eos/armathmatic$ objdump -S main.o

main.o:          file format elf64-x86-64

Disassembly of section .text:

0000000000000000 <main>:
  0:  f3 0f 1e fa          endbr64
  4:  55                   push    %rbp
  5:  48 89 e5             mov     %rsp,%rbp
  8:  48 83 ec 20          sub     $0x20,%rsp
  c:  89 7d ec             mov     %edi,-0x14(%rbp)
  f:  48 89 75 e0          mov     %rsi,-0x20(%rbp)
 13:  c7 45 f4 0a 00 00 00 movl    $0xa,-0xc(%rbp)
 1a:  c7 45 f8 14 00 00 00 movl    $0x14,-0x8(%rbp)
 21:  8b 55 f8             mov     -0x8(%rbp),%edx
 24:  8b 45 f4             mov     -0xc(%rbp),%eax
 27:  89 d6               mov     %edx,%esi
 29:  89 c7               mov     %eax,%edi
 2b:  b8 00 00 00 00      mov     $0x0,%eax
 30:  e8 00 00 00 00      callq   35 <main+0x35>
 35:  89 45 fc             mov     %eax,-0x4(%rbp)
 38:  8b 45 fc             mov     -0x4(%rbp),%eax
 3b:  89 c6               mov     %eax,%esi
 3d:  48 8d 3d 00 00 00 00 lea     0x0(%rip),%rdi        # 44 <main+0x44>
 44:  b8 00 00 00 00      mov     $0x0,%eax
 49:  e8 00 00 00 00      callq   4e <main+0x4e>
 4e:  b8 00 00 00 00      mov     $0x0,%eax
 53:  c9                   leaveq  %eax
 54:  c3                   retq

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arm-linux-gnueabi-objdump -S add.o
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ashu@ashu:~/Documents/CDAC/eos$ cd armairth/
ashu@ashu:~/Documents/CDAC/eos/armairth$ arm-linux-gnueabi-objdump -S add.o

add.o:          file format elf32-littlearm

Disassembly of section .text:

00000000 <add>:
  0:  e52db004          push    {fp}                ; (str fp, [sp, #-4]!)
  4:  e28db000          add     fp, sp, #0
  8:  e24dd00c          sub     sp, sp, #12
  c:  e50b0008          str     r0, [fp, #-8]
 10:  e50b100c          str     r1, [fp, #-12]
 14:  e51b2008          ldr     r2, [fp, #-8]
 18:  e51b300c          ldr     r3, [fp, #-12]
 1c:  e0823003          add     r3, r2, r3
 20:  e1a00003          mov     r0, r3
 24:  e28bd000          add     sp, fp, #0
 28:  e49db004          pop     {fp}                ; (ldr fp, [sp], #4)
 2c:  e12fff1e          bx      lr
ashu@ashu:~/Documents/CDAC/eos/armairth$

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