How to use:

Just replace file
pin-3.17-98314-g0c048d619-gcc-linux/source/tools/ToolUnitTests/elf_symsize.cpp with the new file.

make elf_symsize.test
gcc test.c -o test

Before changing:
wenhui@wenhui:~/Downloads/pin-3.17-98314-g0c048d619-gcc-linux/source/tools/ToolUnitTest
s$ sudo ../../../pin -t obj-intel64/elf_symsize.so -o out.txt -- ./test
Routine _init address 0x55ef54f5c4f0 size 0x17
Routine printf@plt address 0x55ef54f5c520 size 0x10
Routine _start address 0x55ef54f5c540 size 0x2b
Routine deregister_tm_clones address 0x55ef54f5c570 size 0x30
Routine register_tm_clones address 0x55ef54f5c5a0 size 0x40
Routine __do_global_dtors_aux address 0x55ef54f5c5e0 size 0x40
Routine frame_dummy address 0x55ef54f5c620 size 0x5
Routine fun address 0x55ef54f5c625 size 0x24
Routine main address 0x55ef54f5c649 size 0x6e
Routine __libc_csu_init address 0x55ef54f5c6c0 size 0x65
Routine __libc_csu_fini address 0x55ef54f5c730 size 0x2
Routine _fini address 0x55ef54f5c734 size 0x9
fun_ptr = 0x55ef54f5c625
main_ptr = 0x55ef54f5c649
Value of a is 0
Value of a is 1
Value of a is 2
Value of a is 3
Value of a is 4
Value of a is 5
Value of a is 6
Value of a is 7
Value of a is 8
Value of a is 9

After changing:

wenhui@wenhui:~/Downloads/pin-3.17-98314-g0c048d619-gcc-linux/source/tools/ToolUnitTest
s$ sudo ../../../pin -t obj-intel64/elf_symsize.so -o out.txt -- ./test
Routine _init address 0x5560e81174f0 size 0x17
Routine printf@plt address 0x5560e8117520 size 0x10
Routine _start address 0x5560e8117540 size 0x2b
Routine deregister_tm_clones address 0x5560e8117570 size 0x30
Routine register_tm_clones address 0x5560e81175a0 size 0x40
Routine __do_global_dtors_aux address 0x5560e81175e0 size 0x40
Routine frame_dummy address 0x5560e8117620 size 0x5
Routine fun address 0x5560e8117625 size 0x24
Routine main address 0x5560e8117649 size 0x6e
Routine __libc_csu_init address 0x5560e81176c0 size 0x65
Routine __libc_csu_fini address 0x5560e8117730 size 0x2
Routine _fini address 0x5560e8117734 size 0x9
fun_ptr = 0x5560e8117625
main_ptr = 0x5560e8117649
Value of a is 0
CFI voilated
Segmentation fault

Time compare:

After Instrumentation:

wenhui@wenhui:~/Downloads/pin-3.17-98314-g0c048d619-gcc-linux/source/tools/ToolUnitTest
s$ time sudo ../../../pin -t obj-intel64/elf_symsize.so -o out.txt --
/home/wenhui/Downloads/bzip2/bzip2 /home/wenhui/Downloads/linux/*

real   0m0.874s
user   0m0.681s
sys   0m0.209s

Before Instrumentation:
wenhui@wenhui:~/Downloads$ time bzip2 ../Downloads/linux/*

real   0m0.002s

```
user    0m0.001s
sys    0m0.001s
```