

Parent (catcher.c)

Forks

Sets LD_PRELOAD,
executes benchmark
Program

Child (manager.c)

Runs benchmark program

Waits for system
call from child

Read child's registers
to see what system
call it is

Reference table, does
this call have a string
or struct that needs
to be walked?

NO

Yes

Write info about
strings/structs into
shared memory

Set system call to -1
so the original call is not
run

Set instruction pointer
to the walker to go there
after the -1 system call

Intercepts signal and
sets registers to the original
system call

Run original system call

Program system calls

In walker function

Reads info from shared
memory and walks

Sends signal to parent
when done walking

