Part 1: System Call Tracing

System Calls

- Standard interface to allow the kernel to safely handle user requests
- Examples:
  - Read from hardware
  - Spawn a new process
  - Get current time
  - Create shared memory

Strace

- Linux system call tracer
  - Monitors interaction between processes and kernel
- Lots of options available for diagnostics and debugging
  - “-o outfile” saves output to outfile
  - man strace

Part 1

- Create an empty c program called “empty.c”
- > strace -o empty.trace empty.x
- Create a new c program with 4 additional system calls called “part1.c”
- > strace -o part1.trace part1.x
- part1.trace should have 4 more syscall entries than empty.trace
  - Syscall entries are of the form:

    call_name(arguments if applicable) = return_value

Deliverables

- Turn in emtpy.c, empty.trace, part1.c, and part1.trace