

## Problem Sheet #6

**Problem 6.1:** *no Internet via seccomp-bpf (noinet)*

(6+4 = 10 points)

Linux Secure Computing filters are inherited by `fork()/clone()` and `execve()` system calls. Hence, it is possible to write programs disallowing certain system calls before executing some other program. These wrapper programs essentially create sandboxes for other programs to run in.

- a) Write a C or Rust program `noinet` disallowing Internet communication by rejecting all `socket()` system calls that are not of type `AF_UNIX`. If an attempt to create a disallowed socket is made, fail the system call with an `EACCES` error. Here is how `noinet` would be used to execute `date` preventing any Internet access.

```
$ ./build/noinet date  
Thu Apr 11 21:17:06 CEST 2024
```

- b) Run four different command line programs that use the Internet under control of `noinet` and report how they react.