File I/O and IOCTLs

UNX511 Week 3 Class 1

John Sellens

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Seneca Polytechnic

Outline

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File Input/Output

- You've likely seen C programs read/write before
- Let's look at an example from the samples
- Using system calls (open/read/write) rather than stdio
- And note the importance of buffer size
  - Reading/writing large chunks is usually more efficient
  - stdio usually reads/writes blocks (under the covers)

IOCTLs – Device Controls

- `ioctl()` is a system call to get or set information about devices
- The possible `ioctl()` calls vary by device type
- See device man pages e.g. `sd(4)`

References and Links

- https://github-pages.senecapolytechnic.ca/unx511/Week3/Week3.html has links to videos and reference docs
- man pages: `ioctl(2)` `netdevice(7)` `sd(4)`

Summary

- Not much to include in slides this class
- More doing and referring to documentation