

CSGE602055 Operating Systems  
CSF2600505 Sistem Operasi  
Minggu 04: Addressing, Shared Lib, Pointer & I/O  
Programming

Rahmat M. Samik-Ibrahim

Universitas Indonesia

<http://rms46.vlsm.org/2/207.html>

REV69 12-Sep-2017

|           |                      |  |
|-----------|----------------------|--|
| Minggu 00 | 29 Aug - 05 Sep 2017 | Intro & Review                                       |
| Minggu 01 | 07 Sep - 12 Sep 2017 | IPR, SED, AWK, REGEX, & Scripting                    |
| Minggu 02 | 14 Sep - 19 Sep 2017 | Protection, Security, Privacy,<br>& C-language       |
| Minggu 03 | 26 Sep - 30 Sep 2017 | BIOS, Loader, Systemd, & I/O                         |
| Minggu 04 | 03 Okt - 07 Okt 2017 | Addressing, Shared Lib, Pointer<br>& I/O Programming |
| Minggu 05 | 10 Okt - 14 Okt 2017 | Virtual Memory                                       |
| Ming. UTS | 15 Okt - 24 Okt 2017 |  |
| Minggu 06 | 26 Okt - 31 Okt 2017 | Concurrency: Processes & Threads                     |
| Minggu 07 | 02 Nov - 07 Nov 2017 | Synchronization                                      |
| Minggu 08 | 09 Nov - 14 Nov 2017 | Scheduling<br>& Network Sockets Programming          |
| Minggu 09 | 16 Nov - 21 Nov 2017 | File System & Persistent Storage                     |
| Minggu 10 | 23 Nov - 28 Nov 2017 | Special Topic: Blockchain                            |
| Cadangan  | 30 Nov - 09 Des 2017 |  |
| Ming. UAS | 10 Des - 23 Des 2017 |  |

# Agenda

- 1 Start
- 2 Agenda
- 3 Week 04
- 4 Memory
- 5 The End

# Week 04: Addressing, Pointer & I/O Programming

- Reference: (OLD 08 10)
- Variable
  - Value
  - Address
  - Meaning & Context
- Addressing
  - Little-Endian
  - Big-Endian
  - Bi-Endian
- Address Mapping
- I/O Programming
  - Open
  - Close

# Memory (16 bits)

|      | 0  | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | A  | B  | C  | D  | E  | F  |
|------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 0000 | A0 | A1 | A2 | A3 | A4 | A5 | A6 | A7 | A8 | A9 | AA | AB | AC | AD | AE | AF |
| 0010 | B0 | B1 | B2 | B3 | B4 | B5 | B6 | B7 | B8 | B9 | BA | BB | BC | BD | BE | BF |
| 0020 | C0 | C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | CA | CB | CC | CD | CE | CF |
| 0030 | D0 | D1 | D2 | D3 | D4 | D5 | D6 | D7 | D8 | D9 | DA | DB | DC | DD | DE | DF |
|      |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|      |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| FFF0 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

# The End

- This is the end of the presentation.