

First of all, the best way to prepare quiz 2 is to complete “lab4” before taking the quiz!
These are a few pointers and topics that you can prepare/review before taking the quiz 2:

P1. TAF2: In-memory Filesystem for Tiny Allocation

1. Review: III TAF: In-memory Filesystem for Tiny Allocation
2. In particular, review “D” (the bonus problem) and their limitations
3. Think about how to address the limitations
4. Check “inode” (Wikipedia)
5. Check “inode pointer structure” (Wikipedia)

P2. VM Application: Demand Paging / Lazy Loading

1. Check “Demand paging” (Wikipedia)
2. Review: AArch64 Exception and Interrupt Handling
3. Review: process.rs and trap.rs in Lab4

P3. Blocking I/O and Scheduling

1. Check “Asynchronous I/O” (Wikipedia)
2. (new) Check “std::future::Future” (Ref)
3. (new) Check “std::task::Poll” (Ref)
4. Review: syscall.rs and scheduler.rs in Lab4

P4. Designing Signal Handler Interface

1. Check “Signal (IPC)” (Wikipedia)
2. Check “man signal”
3. Check "man sigaction
4. Check "man sigreturn
5. Review: syscall.rs and scheduler.rs in Lab4