Motivation
- constantly switches processes

- instruction flow v. protection domains
- thread: share address space
- tasks: can share or belong to a different one

- critical section: only one thread can access
- shared flag
  - ⤷ process may happen while flag is changing
- 2 shared flags
  - ⤷ no one does anything
- 2 shared flags + delegate

Locks
- lock ensures that only one thread will access resource
- double check locking

- Internals
  - for unicore; only source of comparison is IRQ
  - IRQ controls the lock

Common Synchronization Patterns
- producer: creates copies
- consumer: uses up copies of resource
- buffers: for holding resources

- condition variable
  - ALWAYS used in conjunction w/ locks
  - used inside certain critical section to wait for condition
  - contrast w/ semaphore