## Thread Scheduling

- Threads are scheduled by the OS (ignoring process-scope threads)
- How frequently and how long they get run for will depend on thread priority and the scheduling algorithm used

## Thread Sleep/Wake

- Largely OS dependant
- Usually implemented as a queue of threads that are "running", "sleeping" or "ready"
  - Automatically via indirect system calls such as IO
  - Programatically via system calls such as:
    - std::this\_thread::sleep\_for()
    - std::condition\_variable::notify\_one/all()
    - std::condition\_variable::wait()
- Thread scheduler will pick a thread from the list to run
- Varying algorithms based on:
  - Priority
  - Last run time
- Can involve a context switch