

# 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

# Normal Thread Schedule

