

# Condition Variables with Predicate Exercises

# Lost Wakeup

- What is meant by the term "lost wakeup"?
- Write a program which demonstrates a lost wakeup

# Spurious Wakeup

- What is meant by the term "spurious wakeup"?

# Lost Wakeup Avoidance

- Suggest how to avoid lost wakeups
- Modify your program so that it is not affected by lost wakeups

# Spurious Wakeup Avoidance

- Suggest how to avoid spurious wakeups

# Multiple Threads

- Modify your program so that there are three reader threads
- Modify the reader's task function to display the thread's ID
- Modify the writer's task function so that it
  - Calls `notify_one()` once
  - Calls `notify_one()` three times
  - Calls `notify_all()` once
- Explain the results