Unique Lock Exercises

std::unique_lock

- What are the main differences between std::lock_guard and std::unique_lock?

Output Example
using std::unique_lock

- Rewrite the program from the previous lecture to use std::unique_lock

std::unique_lock vs std::lock_guard

- We could also have avoided the problem with std::lock_guard by writing the code like this:

```
for (int i = 0; i < 5; ++i) {
    // Put the std::lock_guard object in an inner scope
    {
        std::lock_guard<std::mutex> lck_guard(task_mutex);

        // Critical section
        std::cout << str[0] << str[1] << str[2] << std::endl;
        // End of critical section
    } // Calls ~std::lock_guard

    std::this_thread::sleep_for(50ms);
}
```

- Is there any advantage to using std::unique_lock?

std::unique_lock vs std::lock_guard