Mutex Class Exercises

std::mutex Class

- Briefly describe the C++ std::mutex

Rewrite using std::mutex

- Rewrite the "scrambled output" program using a mutex to protect the output operations

- Verify that the output is not scrambled when there are ten concurrent threads running

try_lock()

- Write a program which runs two task functions in separate threads

- The first task function locks a mutex, sleeps for 500ms and releases the lock

- The second task function sleeps for 100ms, then calls try_lock() to lock the mutex. If unsuccessful, it sleeps again for 100ms and calls try_lock() again. If successful, it unlocks the mutex

- Add suitable print statements and run the program

try_lock()

- What do you observe?