The C++ Thread Class Exercises

Pausing a thread

- Modify the "Hello thread" program so that the thread pauses for two seconds before printing out the message

std::thread ID

- Rewrite the "hello thread" program so it prints out the ID of the worker thread in the hello() function

- Modify the main() function to print out its own ID

- Modify the main() function to print out the ID of the hello thread
  - Before calling join()
  - After calling join()

- Explain your results

std::thread objects and functions

- Rewrite the "Hello thread" program by adding a function that takes a std::thread object as argument and prints out the object's thread ID

- Pass the std::thread object created in main to this function

- Where, if anywhere, should join() be called on this object?

std::thread objects and functions (contd)

- Rewrite the "Hello thread" program by adding a function that returns an std::thread object with hello() as its entry point

- Call this function in main

- Print out the ID of the returned std::thread object

- Where, if anywhere, should join() be called on this object?

std::thread and exceptions

- Rewrite the "Hello Thread" example so that the thread function throws an unhandled exception
  - What happens?
- Add a handler for the exception to the main() function
  - What happens?
- Move the handler for the exception into the thread function
  - What happens?
- Explain your observations