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Data Structures and Algorithms

PDC Reading Week 10

What is a memory barrier? How does it differ from pthread\_join?

A memory barrier is a spot in the program that forces all the threads the synchronize before they can continue. Pthread\_join differs in that it waits for the target thread to terminate.

What is a semaphore and when would you use it? Give an example.

A semaphore is a variable shared between threads used to control access to common resources. You would use it any time you would use a pthread.

What is #pragma parallel numthreads(4)?

It creates a team of 4 threads and assigns each thread a set of iterations of a loop.

What questions do you have about the reading?

Nothing so far.