

20875 Software Engineering

Tutorial 6

1. Write a multithreaded C program in which each thread does the following in a loop: (a) print the value of a global integer x , then (b) increment the value of x . Do not use synchronisation primitives.
2. Add a synchronisation primitive to the above program so that the printing and incrementing of x in one thread is viewed as atomic from the others.
3. Enable multithreading in the OpenBLAS implementation of square fp32 matrix multiplication of Tutorial 5.
4. Write a multithreaded version of the filtering exercise in Tutorial 5.