

LAB 1

A - Write a C program that create two threads, each one displaying his rank (related to his creation order). We want to define one unique function for both threads.

B - Define an integer counter that can be shared between your threads. Allow each thread to increment the counter, for instance, 1000000 times. Display the final value of the counter in the main function after joining the threads. Draw conclusions based on the results.

C - Enhance your code to ensure the correct value of the counter. Draw conclusions regarding the execution time of your code. For precise time measurement, utilize the `timeInMilliseconds()` function as defined in the 'timing.c' file on BB.

D - Parallelize the counting of value "3" occurrence in a very very big array of integers. Use 2 threads. The first thread will count the occurrence of "3" in the first half of the array, the second thread will count the occurrence of "3" in the second half of the array. The main thread will wait for the 2 threads to finish and then display the total occurrence of "3" in the array.