

COEN 11 - Fall 2017 - Practice VIII

Solutions on Wednesday

1. Splitting the data -- write a thread function to initialize int array x so that each element receives its index in the array: $x[i] = i$, and each thread initializes its portion of the array. Note that i relates to the entire array. The size of the array is N , and your program will execute with $nthreads$ (which is a global value). Assume N is a multiple of $nthreads$.
2. Splitting the data -- write a thread function to initialize int 2D array x ($N \times N$) so that each thread initializes its portion with $i+j$ in each slot. Note that i and j relate to the entire array. Each thread operates on a strip independently, and your program will execute with $nthreads$ (which is a global value). Assume N is a multiple of $nthreads$.
3. Splitting the work -- calculate the sum of a 1-d array x .