

COMP 8567  
Winter 2023  
Lab 10

- In the main thread, declare three arrays ia1, ia2 and ia3 of 100 elements each and initialize the elements of each array with random integers between (10 and 20)
- Create three thread functions sum\_1, sum\_2 and sum\_3 (these functions should return void \* and accept one argument (void \*))
  - Create three threads in main using pthread\_create() using functions sum\_1, sum2 and sum\_3 and pass arrays ia1, ia2 and ia3 to sum\_1, sum\_2 and sum\_3 respectively.
  - Perform the addition of the array elements in the respective thread functions and return the results to the main thread that uses sum1, sum2 and sum3 to obtain the return value (Note: You need to make use of pthread\_exit() and pthread\_join() as required)
  - Print the sum of all the elements (of all the three arrays) using the return values from the thread

Upload a single file as lab10.c