New Parallel Algorithms Solutions

std::accumulate

- Briefly describe std::accumulate()
  - std::accumulate() returns the sum of the values of its elements
  - It takes the initial value of the sum as an argument
  - It also takes an optional callable object. If provided, this will be used instead of the + operator to calculate the result
- Write a program to demonstrate the use of std::accumulate()
- Rewrite your program to use a parallel execution policy

std::partial_sum

- Briefly describe std::partial_sum()
  - std::partial_sum uses the elements of a container to populate another container
  - The nth element in the target vector will be the sum of the first n elements in the source vector
  - e.g. {1, 2, 3, 4} gives {1, 1+2, 1+2+3, 1+2+3+4}
- Write a program to demonstrate its use
- Using a different standard C++ function, rewrite your program to use a parallel execution policy