for_each Algorithm Solutions

for_each()

- Briefly explain what the for_each() algorithm does
  - for_each() calls a function on every element in an iterator range
- Write a simple program that demonstrates the use of for_each()
- Write the equivalent code, using a range-for loop

for_each() and Modification

- How can the for_each() algorithm be used to modify elements?
  - The element is passed to the function by reference

- Write a simple program that uses for_each() to modify the elements of a container

- Write the equivalent code, using a range-for loop

for_each() vs Loops

- What are the most important differences between for_each() and using a range-for loop?
    - a range-for loop has to access all the elements in a container
    - for_each() can be restricted to a sub-range
    - A range_for loop can terminate early with a break or return statement
    - for_each() can only follow a single path through the code