

# Reordering Algorithms

## Exercises

- What does `reverse()` do?
- What arguments does `reverse()` take?
- Write a simple program that uses `reverse()`
- Write the equivalent code without using `reverse()`

- What does `remove()` do?
- What arguments does `remove()` take?
- What value does `remove()` return?
- What happens to the removed elements?
- What happens when `size()` is called after removing elements from a container?

- Write a simple program that uses `remove()`. Display the return value from `size()` before and after
- Use a range for loop to display the vector after calling `remove()`. Explain your results
- Alter your program so it displays the expected results

- What does `erase()` do?
- What arguments does `erase()` take?
- Alter your program from the previous exercise to call `erase()` after it calls `remove()`
- Display the return value from `size()` after calling `erase()`
- Use a range for loop to display the elements after calling `erase()`. Explain your results

- What does `remove_if()` do?
- What arguments does `remove_if()` take?
- Write a simple program that uses `remove_if()`

- What does `remove_copy()` do?
- What arguments does `remove_copy()` take?
- Write a simple program that uses `remove_copy()`
- Write the equivalent code using a different algorithm function
- Write the equivalent code without using any algorithm functions

- What does `remove_copy_if()` do?
- What arguments does `remove_copy_if()` take?
- Write a simple program that uses `remove_copy_if()`
- Write the equivalent code using a different algorithm
- Write the equivalent code without using any algorithms



- What does `unique()` do?
- What arguments does `unique()` take?
- What value does `unique()` return?
- What happens to the duplicate elements?
- What happens when `size()` is called after calling `unique()`?

- Write a simple program that uses `unique()`. Display the return value from `size()` before and after
- Use a range for loop to display the vector after calling `remove()`. Explain your results
- Alter your program so it displays the expected results