



Algorithm Summary

- The C++ standard specifies over 90 algorithms—many overloaded with two or more versions.
- The standard separates the algorithms into several categories
 - mutating sequence algorithms
 - nonmodifying sequence algorithms
 - sorting and related algorithms
 - generalized numeric operations



Mutating sequence algorithms from header `<algorithm>`

copy	copy_n[*]	copy_if[*]	copy_backward
move[*]	move_backward[*]	swap	swap_ranges
iter_swap	transform	replace	replace_if
replace_copy	replace_copy_if	fill	fill_n
generate	generate_n	remove	remove_if
remove_copy	remove_copy_if	unique	unique_copy
reverse	reverse_copy	rotate	rotate_copy
random_shuffle	shuffle[*]	is_partitioned[*]	partition
stable_partition	partition_copy[*]	partition_point[*]	



Nonmodifying sequence algorithms from header `<algorithm>`

<code>all_of*</code>	<code>any_of*</code>	<code>none_of*</code>	<code>for_each</code>
<code>find</code>	<code>find_if</code>	<code>find_if_not*</code>	<code>find_end</code>
<code>find_first_of</code>	<code>adjacent_find</code>	<code>count</code>	<code>count_if</code>
<code>mismatch</code>	<code>equal</code>	<code>is_permutation*</code>	<code>search</code>
<code>search_n</code>			



Sorting and related algorithms from header <algorithm>

sort	stable_sort	partial_sort	partial_sort_copy
is_sorted[*]	is_sorted_until[*]	nth_element	lower_bound
upper_bound	equal_range	binary_search	merge
inplace_merge	includes	set_union	set_intersection
set_difference	set_symmetric_difference		push_heap
pop_heap	make_heap	sort_heap	is_heap[*]
is_heap_until[*]	min	max	minmax[*]
min_element	max_element	minmax_element[*]	lexicographical_compare
next_permutation	prev_permutation		



Numerical algorithms from header `<numeric>`

`accumulate`

`partial_sum`

`iota*`

`inner_product`

`adjacent_difference`



This topic summarized the Algorithms