

Declaration	Behavior
<pre>template<typename T> constexpr const T& min(const T& a, const T& b); template<typename T> constexpr const T& max(const T& a, const T& b);</pre>	Returns the smaller of a and b
	Returns the greater of a and b

Type	Container	Internal data structure
Sequential	vector<T>	A variable-size vector
	list<T>	A doubly-linked list
	forward_list<T>	A singly-linked list
	deque<T>	A double-ended queue
Associative	set<T>	A set (a map with just a key and no value)
	multiset<T>	A set in which a value can occur many times
	map<K,V>	An associative array
	multimap<K,V>	A map in which a key can occur many times
Unordered	unordered_map<K,V>	A map using a hashed lookup
	unordered_multimap<K,V>	A multimap using a hashed lookup
	unordered_set<T>	A set using a hashed lookup
	unordered_multiset<T>	A multiset using a hashed lookup

Function (STL containers)	Description
T()	create empty container (default constructor)
T(const T&)	copy container (copy constructor)
T(T&&)	move container (move constructor)
~T()	destroy container (including its elements)
empty()	test if container empty
size()	get number of elements in container
push_back(const T&)	insert an element at end of container (sequential)
insert(T&)	insert an element (associative/unordered)
clear()	remove all elements from container
operator=()	assign all elements of one container to other container
operator[]()	access element in container
begin()	returns an iterator to the beginning
end()	returns an iterator to the end

Type	Declaration
std::pair	<pre>template<typename T1, typename T2> struct pair { typedef T1 first_type; typedef T2 second_type; T1 first; T2 second; // ... member functions }</pre>

Function (STL algorithms)	Description
<code>p=find(b,e,x)</code>	p is the first p in [b:e) so that <code>*p==x</code>
<code>p=find_if(b,e,f)</code>	p is the first p in [b:e) so that <code>f(*p)==true</code>
<code>n=count(b,e,x)</code>	n is the number of elements *q in [b:e) so that <code>*q==x</code>
<code>n=count_if(b,e,f)</code>	n is the number of elements *q in [b:e) so that <code>f(*q,x)</code>
<code>replace(b,e,v,v2)</code>	Replace elements *q in [b:e) so that <code>*q==v</code> by v2
<code>replace_if(b,e,f,v2)</code>	Replace elements *q in [b:e) so that <code>f(*q)</code> by v2
<code>p=copy(b,e,out)</code>	Copy [b:e) to [out:p)
<code>p=copy_if(b,e,out,f)</code>	Copy elements *q from [b:e) so that <code>f(*q)</code> to [out:p)
<code>p=move(b,e,out)</code>	Move [b:e) to [out:p)
<code>p=unique_copy(b,e,out)</code>	Copy [b:e) to [out:p); don't copy adjacent duplicates
<code>sort(b,e)</code>	Sort elements of [b:e) using < as the sorting criterion
<code>sort(b,e,f)</code>	Sort elements of [b:e) using f as the sorting criterion
<code>for_each(b, e, f)</code>	Invoke function f() for every element in [b:e)
<code>p=transform(b, e, out, f)</code>	For elements *q in [b:e), put return value of function f() so that <code>f(*q)</code> to [out:p)

<code>std::find</code>	Description (partial)
function prototype	<code>template<typename InputIt, typename T> InputIt find(InputIt first, InputIt last, const T& value);</code>
parameters	first, last - the range of elements to examine value - value to compare the elements to
Return value	Iterator to the first element satisfying the condition or last if no such element is found.