core::vector

```
template <class T, class Allocator = allocator<T> > class vector;
```

Member types

member type	definition	notes
value_type	The first template parameter (T)	
allocator_type	The second template parameter (Allocator)	defaults to: allocator<T>
scalar_type	scalar<T, Allocator>	
const_scalar_type	const scalar_type	
reference	value_type&	
const_reference	const value_type&	
pointer	value_type*	
const_pointer	const value_type*	
iterator	a bidirectional iterator to value_type	convertible to: const_iterator
const_iterator	a bidirectional iterator to const value_type	
reverse_iterator	a bidirectional reverse iterator to value_type	
const_reverse_iterator	a bidirectional reverse iterator to const value_type	
size_type	an unsigned integral type that can represent any non-negative value of difference_type	usually the same as size_t
difference_type	a signed integral type	usually the same as ptrdiff_t

Member functions

(constructor)	Construct vector (public member function)
(destructor)	Vector destructor (public member function)

operator=	Assign content (public member function)

Iterators:

begin	Return iterator to beginning (public member function)
end	Return iterator to end (public member function)
rbegin	Return reverse_iterator to reverse beginning (public member function)
rend	Return reverse_iterator to reverse end (public member function)
cbegin	Return const_iterator to beginning (public member function)
cend	Return const_iterator to end (public member function)
crbegin	Return const_reverse_iterator to reverse beginning (public member function)
crend	Return const_reverse_iterator to reverse end (public member function)

Capacity:

empty	Test whether container is empty (public member function)
dimension	Return dimension (public member function)
length	Return length (public member function)
size	Return size (public member function)
max_size	Return maximum size (public member function)

Element access:

operator[]	Access element (public member function)
at	Access element (public member function)
data	Access data (public member function)

Modifiers:

assign	Assign a new vector (public member function)
create	Create a vector without copying the data (public member function)
fill	Fill vector with specified value (public member function)

linear_fill	Fill vector with linear gradient values (public member function)
value	Set vector elements with specified value (public member function)
linear_value	Set vector elements with linear gradient values (public member function)
generate	Generate values for vector with function (public member function)
remap	Map source data to a vector (public member function)
reshape	Changes the shape of the vector without copying the data (public member function)
swap	Swap content (public member function)
clear	Clear content (public member function)

Operations:

operator+=	Add a value or vector (public member function)
operator-=	Subtract a value or vector (public member function)
operator*=	Multiply a value or vector (public member function)
operator/=	Divided by a value or vector (public member function)
operator&=	And a value or vector (public member function)
operator^=	Xor a value or vector (public member function)
operator|=	Or a value or vector (public member function)

Observers:

get_allocator	Get allocator (public member function)

Non-member function overloads:

operator+	Vector addition (public member function)
operator-	Vector subtraction (public member function)
operator*	Vector multiplication (public member function)
operator/	Vector division (public member function)
operator&	Vector and (public member function)

operator^	Vector xor (public member function)
operator|	Vector or (public member function)
operator<	Vector less than (public member function)
operator>	Vector greater than (public member function)
operator<=	Vector less than or equal to (public member function)
operator>=	Vector greater than or equal to (public member function)
operator==	Vector equal to (public member function)
operator!=	Vector not equal to (public member function)