Member Functions of the vector Class

constructors	Create vectors
operator=	Copy the contents of a vector
operator[]	Return the element of a vector at a specified location
assign	Assign elements to a vector
at	Return the element of a vector at a specified location
back	Access the last element of a vector
begin	Return the iterator pointing to the beginning of a vector
capacity	Return the number of elements that a vector can hold
clear	Erase all elements of a vector
empty	Test whether a vector is empty
end	Return the iterator pointing to the end of a vector
erase	Erase elements of a vector
front	Access the first element of a vector
insert	Insert elements into a vector
max_size	Return the largest possible size of a vector
pop_back	Remove the last element of a vector
push_back	Insert an element at the end of a vector
rbegin	Return the reverse_iterator pointing to the beginning of a reversed vector
rend	Return the reverse_iterator pointing to the end a reversed vector
reserve	Request a change in capacity of a vector
resize	Change the size of a vector
size	Return the size of a vector
swap	Swap the contents of two vectors

Functions Prototypes

constructors	Create vectors
	vector () – create an empty vector
	vector (size_type n, const T& value =T()) – create a vector from the n copies of value
	template <class II> vector (II first, II last) – create a vector from a copy of the elements starting from the element referred by the input iterator first to the element right before the one referred by the input iterator last
	vector (const vector<T>& v) – create a copy of the vector v
destructor	Destroy a vector
	~vector () – deallocate all the storage capacity allocated by a vector
operator=	Copy the contents of a vector
	vector<T> operator= (const vector<T>& v) – assign a copy of the vector v to a vector
operator[]	Return the element of a vector at a specified location
	T& operator[] (size_type pos) – return a reference to the element at position pos in a vector
	const T& operator[] (size_type pos) const – const version of the operator
assign	Assign elements to a vector
	void assign (size_type n, const T& x) – assign n copies of the element x to a vector, replacing its current content
	template <class II> void assign (II first, II last) – assign a copy of the elements, starting from the element referred by the input iterator first to the element right before the element referred by the input iterator last, to a vector, replacing its current content
at	Return the element of a vector at a specified location
	T& at (size_type pos) – return a reference to the element at position pos of a vector and also perform a range check
	const T& at (size_type pos) const – const version of the function
back	Access the last element of a vector
	T& back () – return a reference to the last element of a vector
	const T& back () const – const version of the function
begin	Return the iterator pointing to the beginning of a vector
	iterator begin () – return an iterator to the first element of a vector
	const_iterator begin () const – const version of the iterator
capacity	Return the number of elements that a vector can hold
	size_type capacity () const – return the size of the allocated storage space for a vector
clear	Erase all elements of a vector
	void clear () – set a vector content to an empty vector
empty	Test whether a vector is empty
	bool empty () const – return whether a vector is empty
end	Return the iterator pointing to the end of a vector
	iterator end () – return an iterator referring to the end of a vector
	const_iterator end () const – const version of the iterator
erase	Erase elements of a vector
	iterator erase (iterator i) – erase the element of a vector at position referred by the iterator i
	iterator erase (iterator first, iterator last) – erase all the elements of a vector between

	the positions referred by the iterators first and last
front	Access the first element of a vector
	T& front () – return a reference to the first element of a vector
	const T& front () const – const version of the function
insert	Insert elements into a vector
	iterator insert (iterator i, const T& x) – insert a copy of the element x at the position referred by the iterator i into a vector and return an iterator referring to the insert position
	void insert (iterator i, size_type n, const T& x) – insert n copies of the element x at the position referred by the iterator i into a vector
	template <class II> void insert (iterator i, II first, II last) – insert a copy of the elements, starting from the element referred by the input iterator first to the element right before the one referred by the input iterator last, at the position referred by the iterator i into a vector
max_size	Return the largest possible size of a vector
	size_type max_size () const – return the maximum number of elements that a vector can hold
pop_back	Remove the last element of a vector
	void pop_back () – remove the last element of a vector
push_back	Insert an element at the end of a vector
	void push_back (const T& x) – add a new element at the end of a vector
rbegin	Return the reverse_iterator pointing to the beginning of a reversed vector
	reverse_iterator rbegin () – return a reverse iterator referring to the last element of a vector
	const_reverse_iterator rbegin () const – const version of the reverse iterator
rend	Return the reverse_iterator pointing to the end a reversed vector
	reverse_iterator rend () – return a reverse iterator referring to the element right before the first element of a vector
	const_reverse_iterator rend () const – const version of the reverse iterator
reserve	Request a change in capacity of a vector
	void reserve (size_type n) – request that the capacity of the allocated storage space for a vector be at least n
resize	Change the size of a vector
	void resize (size_type n, T x =T()) – resize the vector content to n elements, and if n is greater than the current size of the vector, its content is expanded by filling of the copies of the element x
size	Return the size of a vector
	size_type size () const – return the number of elements in a vector
swap	Swap the contents of two vectors
	void swap (vector<T>& v) – swap the contents of a vector with the vector v