

MEMBER FUNCTIONS OF THE SET CLASS

constructors	Create sets
operator=	Copy the contents of a set
begin	Return the iterator pointing to the beginning of a set
clear	Erase all elements of a set
count	Count the number of elements of a set with a specific key
empty	Test whether a set is empty
end	Return the iterator pointing to the end of a set
equal_range	Find a range of a set containing all elements with a specific key
erase	Erase elements of a set
find	Find the element of a set with a specific key
insert	Insert elements into a set
key_comp	Compare two keys of a set for ordering
lower_bound	Find the first element of set whose key is not less than a specific key
max_size	Return the largest possible size of a set
rbegin	Return the reverse_iterator to the beginning of a reversed set
rend	Return the reverse_iterator pointing to the end of a reversed set
size	Return the size of a set
swap	Swap the contents of two sets
upper_bound	Find the first element of a set whose key is greater than a specific key
value_comp	Compare two values of a set for ordering

FUNCTION PROTOTYPES

constructors	Create sets
	<code>set (const C& cmp =less<T>)</code> – construct an empty set, using <code>cmp</code> as the comparison object for the values in the set, which can either be a class implementing a function call operator or a pointer to a function
	<code>template <class II> set (II first, II last, const C& cmp =less<T>)</code> – construct a set from a copy of the elements, starting from the element referred by the input iterator <code>first</code> to the element right before the one referred by the input iterator <code>last</code> , using <code>cmp</code> as the comparison object for the values in the set, which can either be a class implementing a function call operator or a pointer to a function
	<code>set (const set<T, C>& s)</code> – construct a copy of the set <code>s</code>
destructor	Destroy a set
	<code>~set ()</code> – deallocate all the storage capacity allocated by a set
operator=	Copy the contents of a set
	<code>set<T, C> operator= (const set<T, C>& s)</code> – assign a copy of the set <code>s</code> to a set
begin	Return the iterator pointing to the beginning of a set
	<code>iterator begin ()</code> – return an iterator to the first element of a set
	<code>const_iterator begin () const</code> – const version of the iterator
clear	Erase all elements of a set
	<code>void clear ()</code> – remove all elements of a set
count	Count the number of elements of a set with a specific key
	<code>size_type count (const T& x) const</code> – search a set for an element with the value <code>x</code> and return the number of elements with that value, which is either <code>1</code> or <code>0</code>
empty	Test whether a set is empty
	<code>bool empty () const</code> – return whether a set is empty
end	Return the iterator pointing to the end of a set
	<code>iterator end ()</code> – return an iterator referring to the element past the end of a set
	<code>const_iterator end ()</code> – const version of the iterator
equal_range	Find a range of a set containing all elements with a specific key
	<code>pair<iterator, iterator> equal_range (const T& x) const</code> – return the bounds of a range that includes all the elements in a set whose values compare equal to <code>x</code> , which includes one element at most
erase	Erase elements of a set
	<code>void erase (iterator i)</code> – erase the element of a set at the position referred by the iterator <code>i</code>
	<code>size_type erase (const T& x)</code> – erase the element with the value <code>x</code> in a set and return the number of elements erased, which is <code>1</code> if the element exists; otherwise, it's <code>0</code>
	<code>void erase (iterator first, iterator last)</code> – erase all the elements of a set between the positions referred by the iterators <code>first</code> and <code>last</code>
find	Find the element of a set with a specific key
	<code>iterator find (const T& x) const</code> – return an iterator to the position of the element with the value <code>x</code> in a set if it's found; otherwise, return the iterator <code>end</code>
insert	Insert elements into a set
	<code>pair<iterator, bool> insert (const T& x)</code> – insert a copy of the element <code>x</code> into a set, but the element is not inserted if another element exists in the set with the same value of <code>x</code> , and it returns a pair, whose first element is referring to either the newly inserted element or to the existing element, and its second element is set to

	<code>true</code> if the new element is inserted; otherwise, it's set to <code>false</code>
	<code>iterator insert (iterator i, const T& x)</code> – insert a copy of the element <code>x</code> into a set, where <code>i</code> is referring to the position in the set, but <code>x</code> will go into the correct position, and returns an iterator referring to the position of <code>x</code> .
	<code>template <class It> void insert (It first, It last)</code> – insert a copy of the elements, between the elements referred by the input iterators <code>first</code> and <code>last</code> , into a set
<code>key_comp</code>	Compare two keys of a set for ordering
	<code>key_compare key_comp () const</code> – return a comparison object associated with a set, which can be used to compare the values of two elements in the set, where <code>key_compare</code> is a member type of the class
<code>lower_bound</code>	Find the first element of set whose key is not less than a specific key
	<code>iterator lower_bound (const T& x) const</code> – return an iterator to the first element of a set whose value does not compares less than <code>x</code> , using the set's comparison object
<code>max_size</code>	Return the largest possible size of a set
	<code>size_type max_size () const</code> – return the maximum number of elements that a set can hold
<code>rbegin</code>	Return the reverse_iterator to the beginning of a reversed set
	<code>reverse_iterator rbegin ()</code> – return a reverse iterator referring to the last element of a set
	<code>const_reverse_iterator rbegin () const</code> – const version of the reverse iterator
<code>rend</code>	Return the reverse_iterator pointing to the end of a reversed set
	<code>reverse_iterator rend ()</code> – return a reverse iterator referring to the element right before the first element of a set
	<code>const_reverse_iterator rend () const</code> – const version of the reverse iterator
<code>size</code>	Return the size of a set
	<code>size_type size () const</code> – return the number of elements in a set
<code>swap</code>	Swap the contents of two sets
	<code>void swap (set<T, C>& s)</code> – swap the contents of a set with the set <code>s</code>
<code>upper_bound</code>	Find the first element of a set whose key is greater than a specific key
	<code>iterator upper_bound (const T& x) const</code> – return an iterator referring to the first element of a set whose value compares greater than <code>x</code> , using the set's comparison object
<code>value_comp</code>	Compare two values of a set for ordering
	<code>value_compare value_comp () const</code> – return a comparison object associated with a set, which can be used to compare the values of two elements in a set, where <code>value_compare</code> is a member type of the class