

# Set ADT

## Overview

The set data structure stores multiple items, typically of the same data type, in an unordered fashion, with no duplicates

The set supports multiple methods including insert, remove, contains, and the + and \* operators.

## Primary Methods

insert(x)	The push method adds element x to the set. The set is an unordered structure however, so it does not matter where item x is inserted.
remove( x)	The remove method deletes and returns the desired item from the set. If the desired item isn't in the set, the set remains unchanged.
contains(x)	The contains method searches the set for the desired item. If the item is in the set, the method returns true, if the item isn't in the set, the method returns false.
operator*	The * operator over loads * and creates a third set from two other sets. The third set is filled only with items that are found in both sets. This could also be considered the interesting operator.
operator+	The + operator over loads + and creates a third set from two other sets. The third set is filled with items from both sets, excluding duplicates.

## Auxiliary Methods

n = size( )	The size method returns the number of items in the set.
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