

Set

Set example

```
#include <set>                                // Header file for std::set

set<int> s;                                    // Create an instance of std::set
s.insert(6);                                  // Add some elements to it
s.insert(7);
s.insert(4);
s.insert(5);
s.insert(3);

for (auto el: s)                              // Use a range-for loop to display all the elements
    cout << el << ", ";
```

Set example (contd)

```
auto ret = s.insert(3);           // Try to insert an element with value 3
if (ret.second)                  // Did it work?
    cout << "Added value 3 to set\n";
else
    cout << "Set already contains " << *(ret.first) << endl;

s.erase(3);                      // Erase the element with value 3
auto ret = s.insert(3);          // Try to insert the element again
if (ret.second)                  // Did it work?
    cout << "Added value 3 to set\n";
else
    cout << "Set already contains " << *(ret.first) << endl;
```