Search functions

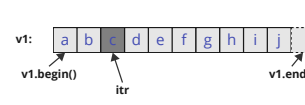
Search functions allow us to find elements or ranges in containers. They perform various kinds of searches, including linear searches and more complex searches based on specific predicates or patterns.

1. find specific element
2. find adjacent elements
3. find sequence of elements

Find functions - searching for specific element
returns iterator

- itr = **find**(v1.begin(), v1.end(), 'c');
- itr = **find_if**(v1.begin(), v1.end(), match);
- itr = **find_if_not**(v1.begin(), v1.end(), match);

example file 01_find1.cpp



Adjacent functions - searching repeated elements
returns iterator of the first

- itr = **adjacent_find**(v1.begin(), v1.end());
- itr = **search_n**(v1.begin(), v1.end(), n, 'c');
- itr = **cearch_n**(v1.begin(), v1.end(), n, match);

example file 01_find2.cpp

Search functions - searching common elements in two vectors:
first occurrence

- itr = **search**(v1.begin(), v1.end(), v2.begin(), v2.end());
- itr = **search**(v1.begin(), v1.end(), v2.begin(), v2.end(), match);

last occurrence

- itr = **find_end**(v1.begin(), v1.end(), v2.begin(), v2.end());
- itr = **find_end**(v1.begin(), v1.end(), v2.begin(), v2.end(), match);

example file 01_find3.cpp