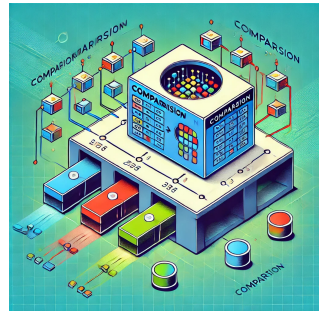


# compare functions

Comparison functions allow us to check whether ranges of elements are equal, whether one sequence is lexicographically less than another, or whether elements follow certain relationships.

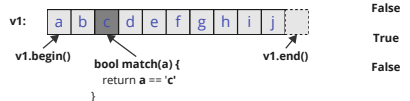
1. test elements against function
2. compare two vectors for identical
3. compare two vectors for permutation



Test functions - test elements using match function

- `bool = all_of(v1.begin(), v1.end(), match);`
- `bool = any_of(v1.begin(), v1.end(), match);`
- `itr = none_of(v1.begin(), v1.end(), match);`

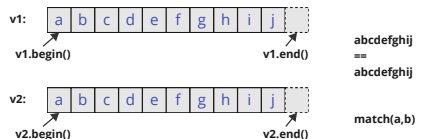
example file 01\_compare1.cpp



Compare functions - compare elements of two vectors

- `bool = equal(v1.begin(), v1.end(), v2.begin());`
- `bool = equal(v1.begin(), v1.end(), v2.begin(), match);`
- `bool = lexicographical_compare(v1.begin(), v1.end(), v2.begin(), v2.end());`
- `bool = lexicographical_compare(v1.begin(), v1.end(), v2.begin(), v2.end(), match);`

example file 01\_compare2.cpp



Permutation functions - compare elements of two vectors regardless of the order

- `bool = is_permutation(v1.begin(), v1.end(), v2.begin());`
- `bool = is_permutation(v1.begin(), v1.end(), v2.begin(), match);`

example file 01\_compare3.cpp

