

Searching Algorithms Solutions

find_first_of()

- Describe the generic find_first_of function
 - find_first_of() takes two iterator ranges
 - It searches the first iterator range for any element in the second range
 - It returns an iterator to the first match
- Write a program which uses this function to print out all the vowels in an std::string, with their index position

adjacent_find()

- Describe the adjacent_find function
 - adjacent_find() takes an iterator range
 - It looks for two neighbouring elements that have the same value
 - It returns an iterator to the first element of the first match
- Write a simple program which demonstrates the use of adjacent_find()

search_n()

- Describe the search_n function
 - search_n() looks for a sequence of n successive elements which have the same given value
 - It returns an iterator to the first element of the sequence
- Write a simple program which demonstrates the use of search_n()

search()

- Describe the search function
 - `search()` takes two iterator ranges
 - It looks for an occurrence of the second iterator range inside the first range
 - It returns an iterator to the first occurrence
- Write a simple program which demonstrates the use of `search()`