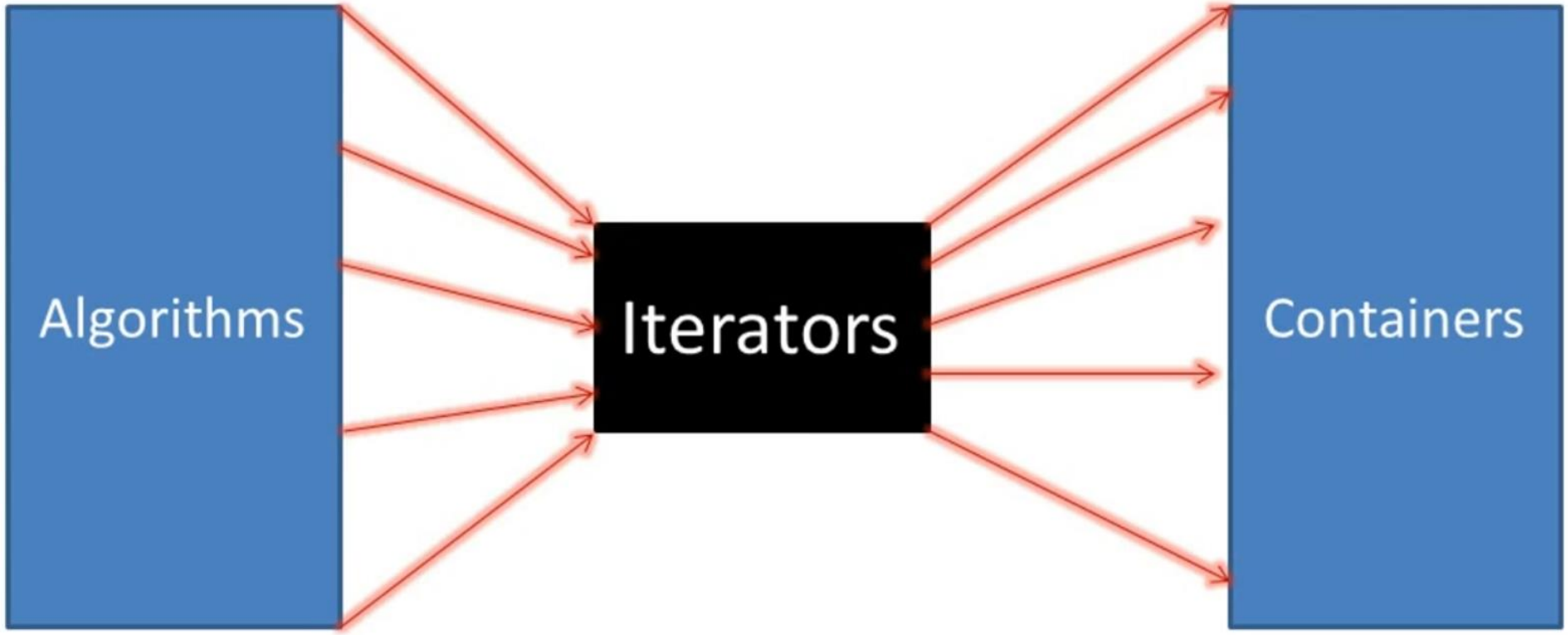
STL and Tree

Standard Template Library (STL)

N Algorithms + M Containers = N * M implementations.

Iterators



N Algorithms + M Containers = ~~N * M implementations.~~

N + M implementations. Easily extendable

Containers

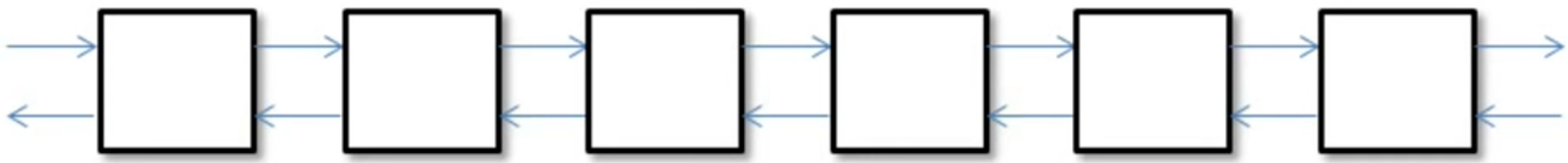
- Sequence containers (array and linked list):
  - vector, deque, list, forward list, array
- Associative Containers (binary tree)
  - set, multiset,
  - map, multimap
- Unordered Containers (hash table)
  - Unordered set/multiset;
  - Unordered map/multimap

Sequence Containers

Vector:

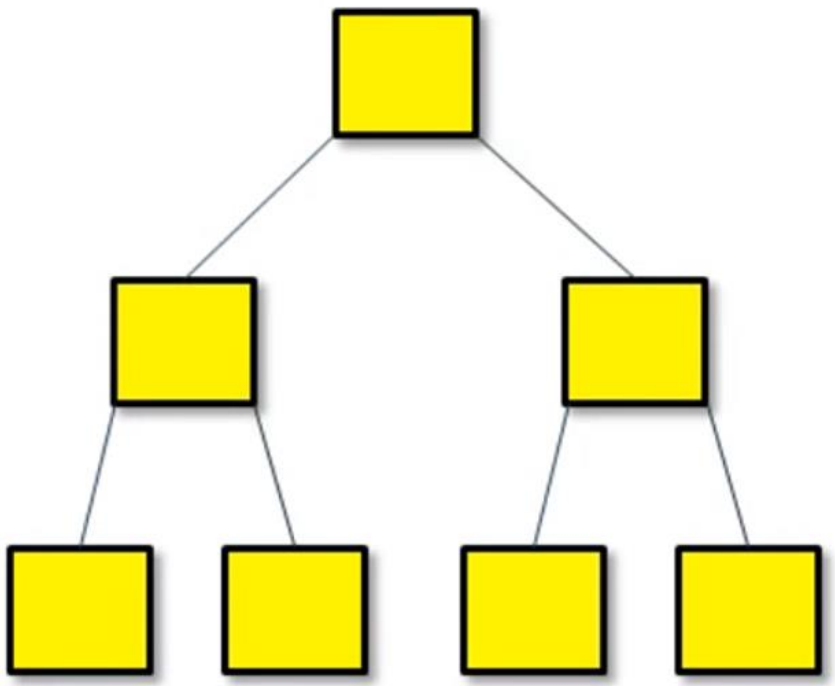
Deque:

List:

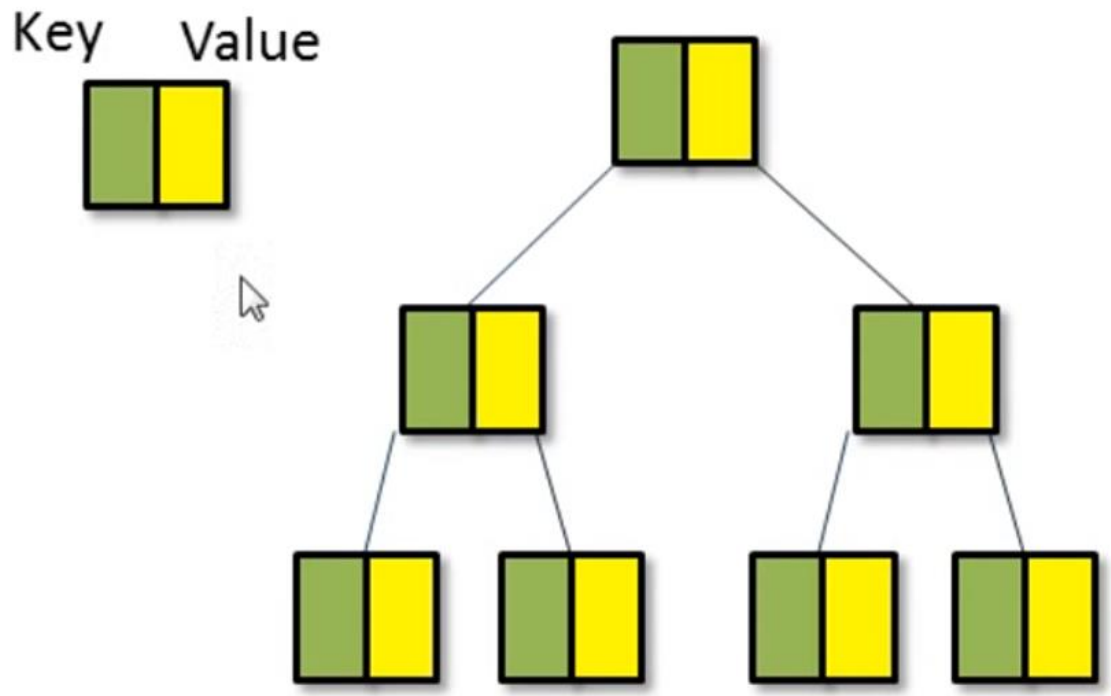


Associative Container

Set or Multiset:

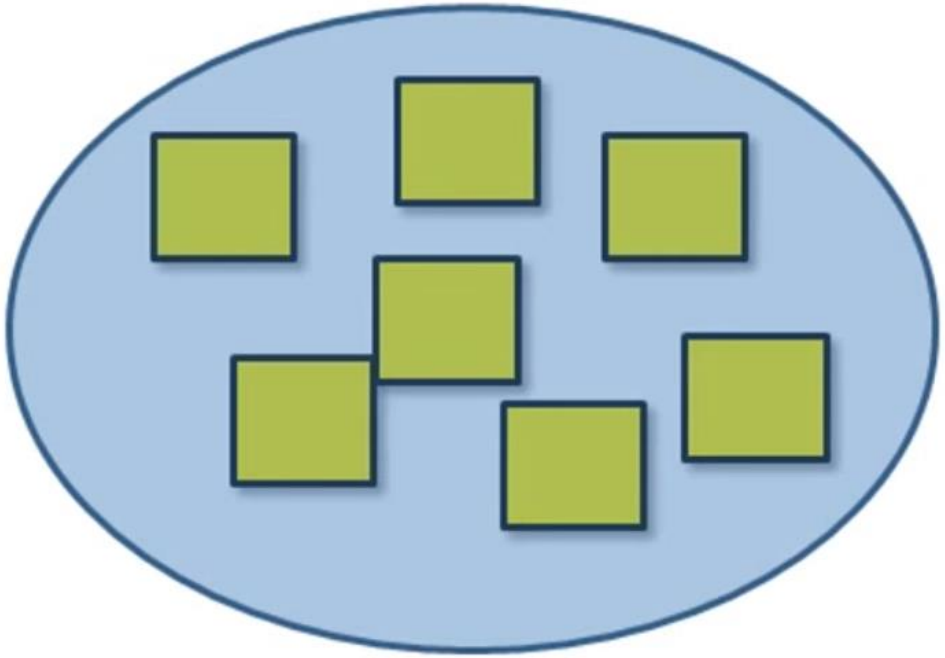


Map or Multimap:

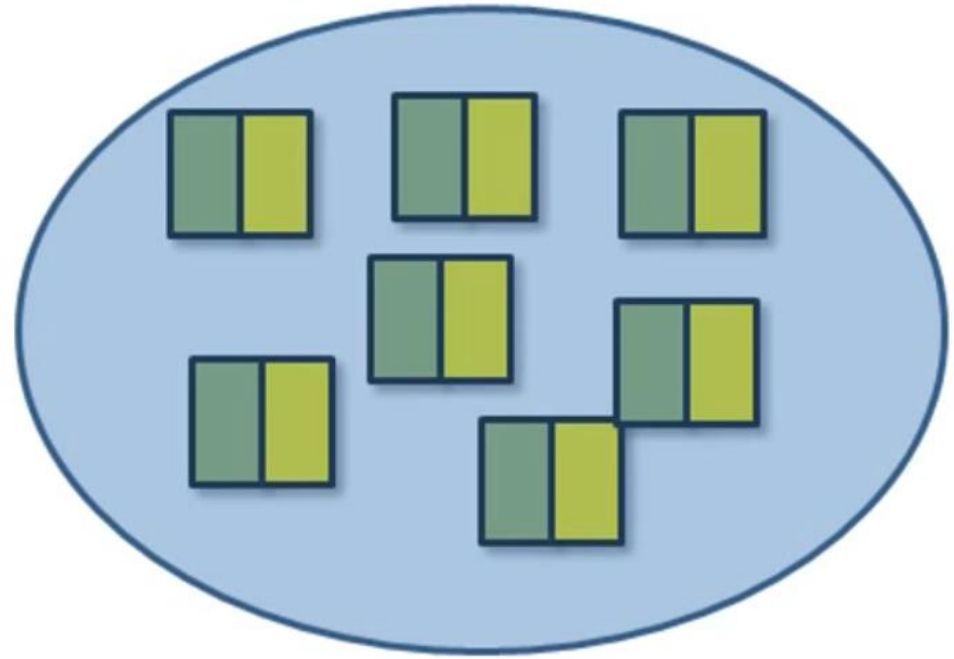


Unordered Associative Container (C++ 11)

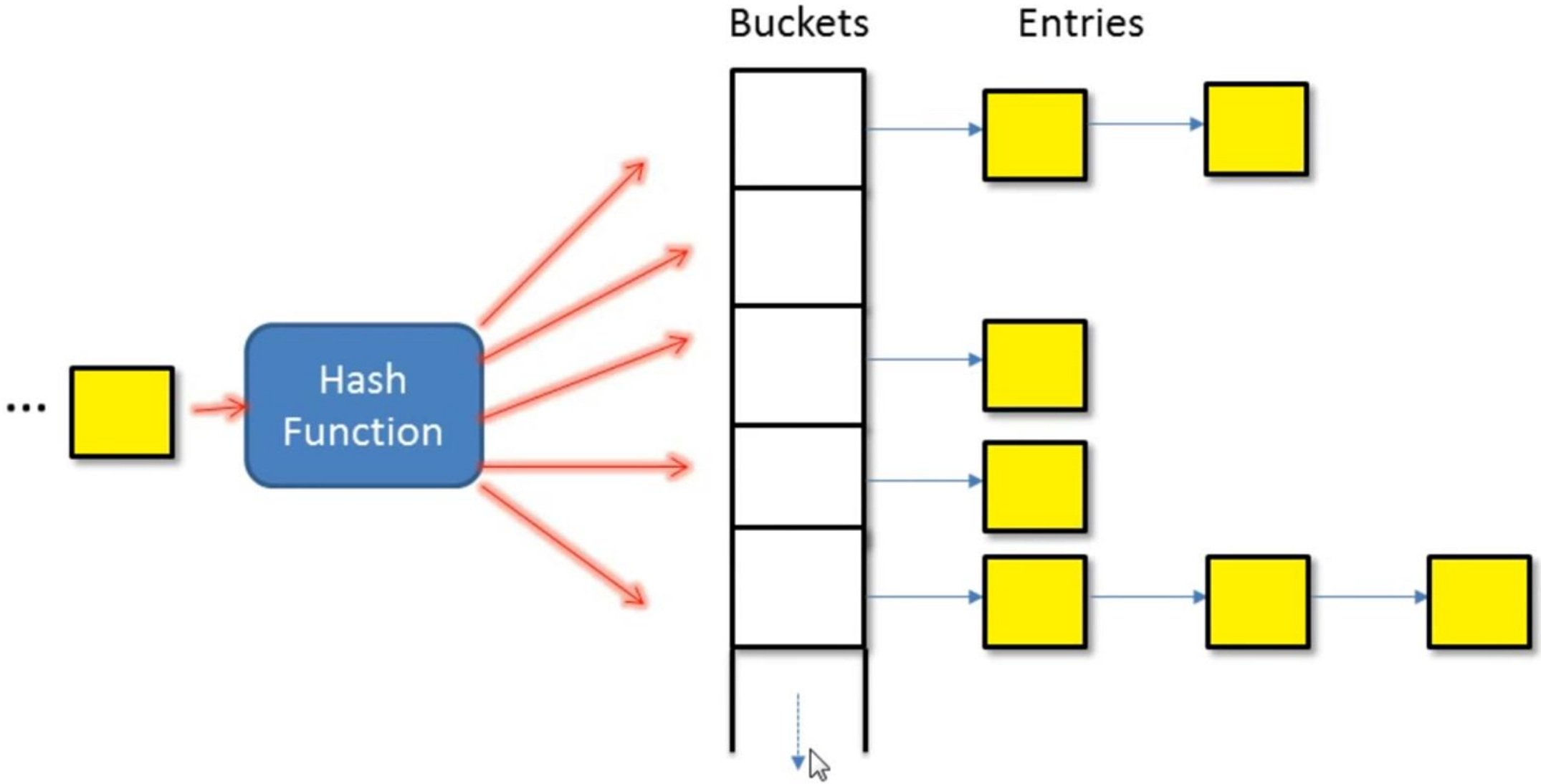
Unordered
Set or Multiset:



Unordered
Map or Multimap:



Implementation of Unordered Containers



Reference

- https://github.com/gibsjose/cpp-cheat-sheet/blob/master/Data%20Structures%20and%20Algorithms.md
- https://github.com/wasit7/toi/tree/master/python/tutorials