Collections and iterators

"Theoretical" aspects that what we should know until now.

ADT

Vector
Bag, Set, (linear) List
Stack, Queue, Deque
Map, MultiMap

Iterator

Sorted: SortedList, SortedSet, SortedMap, SortedMultimap
PriorityQueue

ADT and use

Exam like questions

1. ADT Vector – such that the user don't have to know if it is 0-based or 1-based
2. ADT Vector – without exposing indexes
3. Deque: modifiers operations (specification)
4. List: element access operations (specification)
   Print the elements in a list
5. List and Iterator
   List modifiers operations (specification), by using iterator to specify position
   Given a list with Integer elements, remove even elements from the list
6. IndexedList
   List modifiers operations (specification) (use index for position)
   Given a list with Integer elements, remove even elements from the list
7. FWD Iterator with remove operations
   Given an Iterator over a list with Integer elements, remove (by iterator) evens from the list
8. ADT Map : modifiers operations (specification)
9. Print the elements (pairs of key, value) on a Map ; use iterator
   - Map, Iterator : needed operations (specification)
   - pseudocode for Print subalg.
10. Print the elements (pairs of key, value) on a Map ; do not use iterator over map; can use conversion operations
    - Map : needed operation (specification)
    - pseudocode for Print subalg.
11. Sort a list (external subalg.)
    ADT list - needed operations (specification)
    Specification and pseudocode for sort algorithm
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