Sorted Containers

Containers will be traversed in ascending element order

(Iterators)

by default:

- elements in the container are of type TCE
  - less than comparable element
- sort by < operation

SortedList
SortedSet
SortedMap
SortedMultiMap

Sorted Containers

design choices

- sorted collection
  (Java.util SortedSet, SortedMap)
  (C++ STL internally sorted:
  set, multiset, map, multimap)
- collections being not sorted (implicitly) but with sort operation
  (C++ STL list)
- external sort operation
  (C++ STL algorithm; based on “random access iterator”)

Priority Queue

Priority: element → priority

- strict weak ordering
- priorities are not necessary distinct for all elements

Priority queue

- a container
- in which insertions/extractions are made following a fixed strategy

- each element has a priority associated with it
- each time - the extracted element has a maximum priority

max-priority-queue (by default, for us)

… **min-priority-queue**

Remark: possible model (possible representation)

- each element **e** will be stored according to its priority (➔ container)