

Task 2 Eads

Ring structure - bi directional list

Implement iterators

Create a template class

BiRing <typename Key, typename info>

Define within class iterator and

const iterator

It is imp coz u can modify the structure

Moving forward and backward with iterator

Think abt methods in ring class to

1. Get iterator to existing element in ring structure

2. Begin - returns iterator that can modify

3. Cbegin - returns const iterator

Think abt and use: when u have iterators use them as much as possible. When iterators are prop implemented should hide the pointers before rest of class. You won't need pointer outside iterator classes

Operations on ring : adding elements -- hard to tell beginning so doesn't make sense for push front and push back so only 1 operation, 1 to get element from structure, method like find to return iterator, add element before or after the iterator, structure was discussed in detail during lecture, try to think abt interface, not very big but complete interface, we will use quite standard data structure approach.

Define shuffle function that will intermix contents of two rings

Template function and

External function: Biring Shuffle (const Biring& first, const Biring & second, int nbfirst, int nbsecond, int reps) ;

Nbfirst = no of elements from frst ring

-- Returns a new ring

-- Empty ring shouldn't be passed as arguement

-- no of elements = (nbfirst + nbsecond)reps

If in frst ring, keys : 1 3 5 7 9

Second ring keys : 2

Then result should be 1 3 5 2 2 2 2

Then 1 3 5 2 2 2 2 7 9 1 2 2 2 2

Keys don't need be unique ;

Moving constructors and moving assignment operators should be implemented ;

Example :

Private:

T * pmem ;

Int size;

Pmem = src.pmem;

Src.Pmem = nullptr;

With moving constructor u just move the pts and set source to now constructor

