1061 Data Structure HW4

1. Extend Chian to include the following methods:

(a) clone(): makes a copy of a chian.

(b) lastIndexOf(): returns the index of the rightmost occurrence of the specified object.

(c) set(theIndex,theElement): set the element whose index is theIndex with theElement

(d) removeRange(i,j): removes all elements in the index range from *i* to *j*.

(e) leftShift(i): shifts the list elements by i positions. If L=[0,1,2,3,4] then L.leftShift(2)results in L=[2,3,4].

2. Analysis the time complexity of your methods in problem 1.

3. Write Java programs to test you code.