

```
1  import java.util.Iterator;
2  import java.util.LinkedList;
3
4  public class SearchMessagesByUser implements Iterator<MessageMomento>{
5      private LinkedList<MessageMomento> collection;
6
7      public SearchMessagesByUser(LinkedList<MessageMomento> givenCollection)
8      {
9          this.collection = givenCollection;
10     }
11
12     @Override
13     public boolean hasNext() {
14         LinkedList<MessageMomento> copyList = null;
15
16         for(MessageMomento message : this.collection)
17         {
18             copyList.addFirst(message);
19         }
20
21         copyList.pop();
22
23         if (copyList.getFirst() != null)
24         {
25             return false;
26         }else{
27             return true;
28         }
29     }
30
31     @Override
32     public MessageMomento next() {
33         MessageMomento returnItem = null;
34
35         if (this.hasNext())
36         {
37             MessageMomento cycledItem = this.collection.pop();
38             this.collection.addLast(cycledItem);
39             returnItem = this.collection.getFirst();
40         }
41
42         return returnItem;
43     }
44 }
```