```java
 1 package dao;
 2
 3 import adt.*;
 4 import java.io.*;
 5 import java.io.File;
 6
 7 /**
 8  *
 9  * @author Chew Lip Sin
10  */
11 public class DAO<T> {
12
13 //course = course.dat
14 //program = program.dat
15 //courseProgram = courseProgram.dat
16     public void saveToFile(ListInterface<T> list, String fileName) {
17         File file = new File(fileName);
18 //        if (file.createNewFile()) {
19 //            System.out.println(fileName + " File Created");
20 //        } else {
21 //            System.out.println("File " + fileName + " already exists");
22 //        }
23         try {
24             ObjectOutputStream ooStream = new ObjectOutputStream(new
FileOutputStream(file));
25             ooStream.writeObject(list);
26             ooStream.close();
27         } catch (FileNotFoundException ex) {
28             System.out.println("\nFile not found");
29         } catch (IOException ex) {
30             System.out.println("\nCannot save to file");
31         }
32     }
33
34     public void saveToFile(LinkedListInterface<T> list, String fileName) {
35         try (FileOutputStream fileOut = new FileOutputStream(fileName);
ObjectOutputStream objectOut = new ObjectOutputStream(fileOut)) {
36
37             objectOut.writeObject(list);
38
39 //            System.out.println("DoublyLinkedList saved to " + fileName);
40         } catch (IOException e) {
41             e.printStackTrace();
42         }
43     }
44
```

```java
45      public ListInterface<T> retrieveFromFile(String fileName){
46          File file = new File(fileName);
47          ListInterface<T> list = new ArrList<>();
48          try {
49              ObjectInputStream oiStream = new ObjectInputStream(new FileInputStream(file));
50              list = (ArrList<T>) (oiStream.readObject());
51              oiStream.close();
52          } catch (FileNotFoundException ex) {
53              System.out.println("\nNo such file.");
54          } catch (IOException ex) {
55              throw new RuntimeException(ex);
56          } catch (ClassNotFoundException ex) {
57              System.out.println("\nClass not found.");
58          } finally {
59              return list;
60          }
61      }
62
63      public LinkedListInterface<T> dLLRetrieveFromFile(String fileName) {
64          File file = new File(fileName);
65          LinkedListInterface<T> list = new DoublyLinkedList<>();
66          try (FileInputStream fileIn = new FileInputStream(fileName); ObjectInputStream
objectIn = new ObjectInputStream(fileIn)) {
67
68              list = (DoublyLinkedList<T>) objectIn.readObject();
69
70              // Now you can use the retrievedList object as your DoublyLinkedList
71 //           System.out.println("DoublyLinkedList retrieved from " + fileName);
72          } catch (IOException | ClassNotFoundException e) {
73              e.printStackTrace();
74          }
75          return list;
76      }
77 }
```