```
import java.util.*;
2 /**
   * Write a description of class LoyaltyCardList here.
    * @author (Grant Allenby)
    * @version (V1.0 5/12/18)
    */
  public class LoyaltyCardList
10
      private ArrayList<LoyaltyCard> loyaltyCards;
11
12
       * Constructor for objects of class LoyaltyCardList
13
15
      public LoyaltyCardList()
16
17
          loyaltyCards = new ArrayList<LoyaltyCard>();
18
19
20
21
       * Method that allows for adding of a loyalty card to the loyalty card array
   list.
22
      public void addLoyaltyCard(LoyaltyCard loyaltyCard)
23
24
25
          loyaltyCards.add(loyaltyCard);
26
      }
27
28
       * @return the number of loyalty cards.
29
30
       */
      public int getNumberOfLoyaltyCards()
31
32
33
           return loyaltyCards.size();
34
      }
35
36
      /**
37
       *
39
      public void getLoyaltyCard(int loyaltyCardEntry)
40
          if (loyaltyCardEntry < 0)</pre>
42
          {
43
               System.out.println("Negative entry: " + loyaltyCardEntry);
44
45
          else if (loyaltyCardEntry < getNumberOfLoyaltyCards())</pre>
46
47
               LoyaltyCard loyaltyCard = loyaltyCards.get(loyaltyCardEntry);
               loyaltyCard.printCustomerDetails();
48
49
          }
50
          else
51
          {
52
               System.out.println("No such entry: " + loyaltyCardEntry);
53
```

```
}
55
56
       /**
57
        */
58
59
      public void getAllLoyaltyCards()
60
            for(LoyaltyCard loyaltyCard : loyaltyCards)
61
63
                 loyaltyCard.printCustomerDetails();
                 System.out.println();
64
65
            }
       }
66
68
      public boolean getLoyaltyCard(String cardNumber)
69
            int index = 0;
71
            for (LoyaltyCard loyaltyCard: loyaltyCards)
72
                 if (cardNumber.equals(loyaltyCard.getCardNumber()))
74
                 {
75
                     loyaltyCards.get(index);
                     return true;
77
                 }
78
            }
79
            return false;
       }
80
82
       /**
83
        *
84
        */
      public void removeLoyaltyCard(int loyaltyCardEntry)
85
86
87
            if(loyaltyCardEntry < 0)</pre>
88
                System.out.println("Negative entry :" + loyaltyCardEntry);
90
            }
91
            else if(loyaltyCardEntry < getNumberOfLoyaltyCards())</pre>
            {
93
                 loyaltyCards.remove(loyaltyCardEntry);
            }
94
            else
96
            {
97
                 System.out.println("No such entry :" + loyaltyCardEntry);
98
            }
99
      }
100
101
       /**
102
        */
      public boolean removeLoyaltyCard(String cardNumber)
104
105
            int index = 0;
            for (LoyaltyCard loyaltyCard: loyaltyCards)
107
```

```
{
109
                 if (cardNumber.equals(loyaltyCard.getCardNumber()))
110
                 {
                      loyaltyCards.remove(index);
                      return true;
112
113
                 index++;
115
             return false;
       }
117
118
119
       /**
120
121
        */
       public int search(String cardNumber)
122
123
           int index = 0;
           for (LoyaltyCard loyaltyCard : loyaltyCards)
125
126
                if (cardNumber.equals(loyaltyCard.getCardNumber()))
128
                {
129
                     return index;
                }
                else
131
132
133
                     index++;
134
            }
136
           return -1;
       }
137
138
   }
139
```