```cpp
 1  /************************************************************************
 2   * AUTHOR           : Nick Reardon
 3   * Assignment #4    : Deque To Queue
 4   * CLASS            : CS1D
 5   * SECTION          : MW - 2:30p
 6   * DUE DATE         : 02 / 10 / 20
 7   ************************************************************************/
 8  #include "main.h"
 9
10  using std::cout; using std::endl;
11
12
13  int main()
14  {
15
16      /*
17       * HEADER OUTPUT
18       */
19      PrintHeader(cout, "Prompt.txt");
20
21      /**********************************************************************/
22
23      LinkedDeque<std::string> deque;
24      LinkedQueue<std::string> queue;
25
26      std::ifstream iFile;
27
28      cout << endl << " --- Using Deque implementation ---" << endl << endl;
29
30
31      cout << "deque currently empty - empty() method called in printAll() to show" ⏎
32          << endl;
         PrintWithLabel("Printing deque:", deque, cout);
33
34      //--------------------------------------------------
35
36      cout << "Reading into deque from file using insertBack() method" << endl;
37
38      std::string temp;
39      iFile.open("Input.txt");
40
41      while ( getline(iFile, temp) )
42      {
43          deque.insertBack(temp);
44      }
45      iFile.close();
46
47      PrintWithLabel("Printing deque:", deque, cout);
48
49      //--------------------------------------------------
50
51      cout << "deque - calling size method" << endl;
```

```cpp
52          cout << "Size is currently: " << deque.size() << endl << endl;
53
54      //-------------------------------------------------
55
56          cout << "deque - Calling front() method" << endl;
57          cout << "front value is currently: " << deque.front() << endl << endl;
58
59      //-------------------------------------------------
60
61          cout << "deque - Calling eraseFront() method" << endl;
62          deque.eraseFront();
63          cout << "front value is now currently: " << deque.front() << endl << endl;
64
65          cout << "deque - Calling eraseFront() method" << endl;
66          deque.eraseFront();
67          PrintWithLabel("Printing deque:", deque, cout);
68
69      //-------------------------------------------------
70      //-------------------------------------------------
71
72          cout << endl << " --- Using Queue wrapper of deque implementation ---" <<      ⮑
               endl << endl;
73
74
75          cout << "Queue currently empty - empty() method called in printAll() to show" ⮑
                 << endl;
76          PrintWithLabel("Printing Queue:", queue, cout);
77
78      //-------------------------------------------------
79
80          cout << "Reading into queue from file using enqueue() method" << endl;
81
82          temp.clear();
83          iFile.open("Input.txt");
84
85          while (getline(iFile, temp))
86          {
87              queue.enqueue(temp);
88          }
89          iFile.close();
90
91          PrintWithLabel("Printing Queue:", queue, cout);
92
93      //-------------------------------------------------
94
95          cout << "queue - calling size method" << endl;
96          cout << "Size is currently: " << queue.size() << endl << endl;
97
98      //-------------------------------------------------
99
100         cout << "queue - Calling front() method" << endl;
101         cout << "front value is currently: " << queue.front() << endl << endl;
```

```
102
103      //------------------------------------------------
104
105      cout << "queue - Calling dequeue() method" << endl;
106      queue.dequeue();
107      cout << "front value is now currently: " << queue.front() << endl << endl;
108
109      cout << "queue - Calling dequeue() method" << endl;
110      queue.dequeue();
111      PrintWithLabel("Printing Queue:", queue, cout);
112
113
114      system("pause");
115      return 0;
116  }
117
118
```