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 1  **********************************************************************
 2  * PROGRAMMED BY : Nick Reardon
 3  * CLASS         : CS1D
 4  * SECTION       : MW - 2:30p
 5  * Assignment #4 : Deque To Queue
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 7
 8                      Assignment #4 - Deque To Queue
 9
10      Implement a Queue interface with a class that is based on a
11  Deque using a wrapper. Do not use the STL. Highlight your Deque
12  and Queue classes.
13
14
15           Queue   method          | Deque Implementation
16           --------------------|----------------------
17           size()              | size()
18           --------------------|----------------------
19           empty()             | empty()
20           --------------------|----------------------
21           front()             | front()
22           --------------------|----------------------
23           enqueue()           | insertBack()
24           --------------------|----------------------
25           dequeue()           | eraseFront()
26           --------------------|----------------------
27
28      Test all the member functions (size(), empty(), front(),
29  enqueue, and dequeue) of the queue class with the following
30  data.
31
32          String string1 = "A man, a plan, a canal, Panamaö;
33          String string2 = ôWas it a car or a cat I saw?";
34          String string3 = ôSit on a potato pan, Otis";
35          String string4 = ôNo lemon, no melon";
36
37
38  Due February 10th
39
40
41  **********************************************************************
42
43
44   --- Using Deque implementation ---
45
46  deque currently empty - empty() method called in printAll() to show
47
48  Printing deque:
49  Container is empty
50
51  Reading into deque from file using insertBack() method
52
```

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53  Printing deque:
54  A man, a plan, a canal, Panama
55  Was it a car or a cat I saw?
56  Sit on a potato pan, Otis
57  No lemon, no melon
58
59  deque - calling size method
60  Size is currently: 4
61
62  deque - Calling front() method
63  front value is currently: A man, a plan, a canal, Panama
64
65  deque - Calling eraseFront() method
66  front value is now currently: Was it a car or a cat I saw?
67
68  deque - Calling eraseFront() method
69
70  Printing deque:
71  Sit on a potato pan, Otis
72  No lemon, no melon
73
74
75   --- Using Queue wrapper of deque implementation ---
76
77  Queue currently empty - empty() method called in printAll() to show
78
79  Printing Queue:
80  Container is empty
81
82  Reading into queue from file using enqueue() method
83
84  Printing Queue:
85  A man, a plan, a canal, Panama
86  Was it a car or a cat I saw?
87  Sit on a potato pan, Otis
88  No lemon, no melon
89
90  queue - calling size method
91  Size is currently: 4
92
93  queue - Calling front() method
94  front value is currently: A man, a plan, a canal, Panama
95
96  queue - Calling dequeue() method
97  front value is now currently: Was it a car or a cat I saw?
98
99  queue - Calling dequeue() method
100
101  Printing Queue:
102  Sit on a potato pan, Otis
103  No lemon, no melon
104
```

105 Press any key to continue . . .