COMP 2231

Output Capture of Assignment 2 - Stacks & Queues

Author : Koki Yamanaka Student ID : T00681865

Submission date: 28th Oct 2022

Question 1 (Array-stack with modified top variable):

TEST CASE 1 : add 5 elements
TEST CASE 2 : remove 2 elements

TEST CASE 3: remove all elements in stack

```
======= TEST CASE 1 =======
71
72
73
74
75
top variable points to index : 4
======= TEST CASE 2 =======
peeked element : 73
71
72
73
top variable points to index : 2
====== TEST CASE 3 =======
top variable points to index : -1
```

Question 2 (drop-out-stack):

```
==== ADD 5 ELEMENTS ON STACK =====
the whole current stack :
Nicole
Koki
Katie
Peter
John
current stack size : 5
element on top of the stack is : Nicole
==== PUSH 2 ELEMENTS ON STACK =====
the whole current stack :
Dwayne
Walter
Nicole
Koki
Katie
current stack size : 5
element on top of the stack is : Dwayne
==== REMOVE 3 ELEMENTS FROM STACK =====
removed element 1 : Dwayne
removed element 2 : Walter
removed element 3 : Nicole
the whole current stack :
Koki
Katie
current stack size : 2
element on top of the stack is : Koki
```

Question 3 (Drop-out-queue):

TEST CASE 1:

add 5 elements at first, then add 2 elements from the front and back of the queue

```
===TEST CASE 1 - ADD ELEMENTS===
current queue looks like :
3
5
7
the size :5
front element :1, last element :9
_____
current queue looks like :
102
100
1
3
5
7
9
the size :7
front element :102, last element :9
_____
current queue looks like :
102
100
3
5
7
9
200
202
the size :9
front element :102, last element :202
_____
```

TEST CASE 2:

Remove 2 elements from the front and back of the queue

```
______
===TEST CASE 2 - REMOVE ELEMENTS===
current queue looks like :
3
5
7
9
200
202
the size :7
front element :1, last element :202
_____
current queue looks like :
1
3
5
7
9
the size :5
front element :1, last element :9
______
TEST CASE 3::
Remove 2 more elements from the front and back
===TEST CASE 3 - CONTINUE REMOVE ELEMENTS===
current queue looks like :
5
7
9
the size :3
front element :5, last element :9
_____
current queue looks like :
5
the size :1
front element :5, last element :5
______
```

```
TEST CASE 4 : make queue empty and peek an element
```

===TEST CASE 4 - MAKING STACK EMPTY=== current queue looks like :

the size :0

Can only enter input while your program is running

EmptyCollectionException: The queue is empty.

at Deque.first(Deque.java:161)

at Driver.main(Driver.java:106)