

Assignment 3

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Array Dynamic Queue

```
→ linear-data-struct-algorithms git:(master) /usr/bin/env /Library/Java/JavaVirtualMachines/jdk-18.0.2.1.jdk/Contents/Home/bin/java -XX:+ShowCodeDetailsInExceptionMessages -cp /Users/aruiz/Library/Application\ Support/Code/User/workspaceStorage/0cc13e5f88dadb1a54bb73d0e98575ae/redhat.java/jdt_ws/linear-data-struct-algorithms_b10ed582/bin QueueTest2
-1
-1
0
-1
0
1
1
-1
0
1
5
-1 dequeued
0
1
5
0 dequeued
1
5
1 dequeued
5
5 dequeued
→ linear-data-struct-algorithms git:(master) █
```

Linked Queue

```
→ linear-data-struct-algorithms git:(master) /usr/bin/env /Library/Java/JavaVirtualMachines/jdk-18.0.2.1.jdk/Contents/Home/bin/java -XX:+ShowCodeDetailsInExceptionMessages -cp /Users/aruiz/Library/Application\ Support/Code/User/workspaceStorage/0cc13e5f88dadb1a54bb73d0e98575ae/redhat.java/jdt_ws/linear-data-struct-algorithms_b10ed582/bin QueueTest3
-1
-1
0
-1
0
1
-1
0
1
5
-1 dequeued
0
1
5
0 dequeued
1
5
1 dequeued
5
5 dequeued
→ linear-data-struct-algorithms git:(master) █
```

Dynamic Resizing Stack

```
→ linear-data-struct-algorithms git:(master) x /usr/bin/env /Library/Java/JavaVirtualMachines/jdk-18.0.2.1.jdk
/Contents/Home/bin/java -XX:+ShowCodeDetailsInExceptionMessages -cp /Users/aruiz/Library/Application\ Support/Co
de/User/workspaceStorage/0cc13e5f88dacb1a54bb73d0e98575ae/redhat.java/jdt_ws/linear-data-struct-algorithms_b10ed
582/bin StackTest2

Pushing elements onto doubleStack
1.1 2.2 3.3 4.4 5.5
The double stack:
1.1
2.2
3.3
4.4
5.5
After clearing the stack, it becomes:

Pushing elements onto doubleStack
1.1 2.2 3.3 4.4 5.5

Popping elements from doubleStack
5.5 4.4 3.3 2.2 1.1

Pushing elements onto integerStack
1 2 3 4 5 6 7 8 9 10
The integer stack:
1
2
3
4
5
6
7
8
9
10
The top integer is: 10

Popping elements from integerStack
10 9 8 7 6 5 4 3 2 1
→ linear-data-struct-algorithms git:(master) x
```

Linked Stack

```
→ linear-data-struct-algorithms git:(master) x /usr/bin/env /Library/Java/JavaVirtualMachines/jdk-18.0.2.1.jdk
/Contents/Home/bin/java -XX:+ShowCodeDetailsInExceptionMessages -cp /Users/aruiz/Library/Application\ Support/Co
de/User/workspaceStorage/0cc13e5f88dadb1a54bb73d0e98575ae/redhat.java/jdt_ws/linear-data-struct-algorithms_b10ed
582/bin StackTest3

Pushing elements onto doubleStack
1.1 2.2 3.3 4.4 5.5
The double stack:
5.5
4.4
3.3
2.2
1.1
After clearing the stack, it becomes:

Pushing elements onto doubleStack
1.1 2.2 3.3 4.4 5.5

Popping elements from doubleStack
5.5 4.4 3.3 2.2 1.1

Pushing elements onto integerStack
1 2 3 4 5 6 7 8 9 10
The integer stack:
10
9
8
7
6
5
4
3
2
1
The top integer is: 10

Popping elements from integerStack
10 9 8 7 6 5 4 3 2 1
→ linear-data-struct-algorithms git:(master) x
```

Replit sharable link:

<https://replit.com/join/jxhwpwxclo-albertoruizbern>