

isEmpty() failed Test Case

isEmpty() Failed Test Case

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

Inserting 3
Inserting 4
Size is 6- size() Failed
Inserting 1
Inserting 2
Inserting 3
Inserting 4
Inserting 5
Inserting 6
Inserting 7
Inserting 8
Inserting 9
Inserting 10
Max Size is 11 isFull() Passed
sri@HarishLaptop:~/source/cpts223/pa1V1/ma1$ |
```

isFull() Passed Test Case

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

Size is 6- size() Failed
Inserting 1
Inserting 2
Inserting 3
Inserting 4
Inserting 5
Inserting 6
Inserting 7
Inserting 8
Inserting 9
Inserting 10
Max Size is 11 isFull() Passed
Inserting 1
Enqueued Succussfully when Queue is Empty - enqueue() Passed
sri@HarishLaptop:~/source/cpts223/pa1V1/ma1$ |
```

Enqueue() when Empty Passed Test Case

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

Enqueued Succussfully when Queue is Empty - enqueue() Passed
Inserting 10
Inserting 10
Inserting 10
Inserting 10
Inserting 10
Inserting 10
Inserting 10
Inserting 10
Inserting 10
Inserting 10
queue full anything after means enqueue() failed. If nothing is enqueued after, enqueue() passed
Overflow
Program Terminated
sri@HarishLaptop:~/source/cpts223/pa1V1/ma1$ |
```

Enqueue() when Full Passed Test Case

```
Inserting 10
Inserting 10
Inserting 10
Inserting 10
Inserting 10
Inserting 10
Inserting 10
queue full anything after means enqueue() failed. If nothing is enqueued after, enqueue() passed
Overflow
Program Terminated
Queue is not empty, Will Dequeue until empty. If Dequeue occurs and does output underFlowed, then Dequeue Passed, if not dequeue failed
Removing 1644776886
UnderFlow
Program Terminated
sri@HarishLaptop:~/source/cpts223/pa1V1/ma1$ |
```

Dequeue when empty passes Test Case

```
Removing 4
Removing 5
Removing 6
Removing 7
Removing 8
Removing 9
Removing 10
Removing 1
Dequeue is Succussfull
Removing 1478894681
```

Dequeue when full passes Test Case

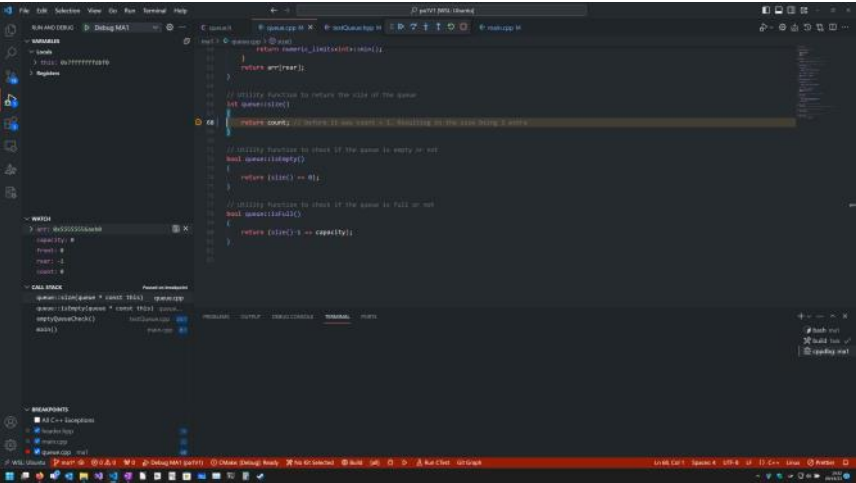
```
Removing 4
Removing 5
Removing 6
Removing 7
Removing 8
Removing 9
Removing 10
Removing 1
Dequeue is Successfull
Removing 1470094681
If peek returns any value, then Peak() has failed. If not then Peek is successfull
UnderFlow
Program Terminated
-2147483648
sri@HarishLaptop:~/source/cpts223/pa1V1/ma1$
```

Peek when empty passes test case

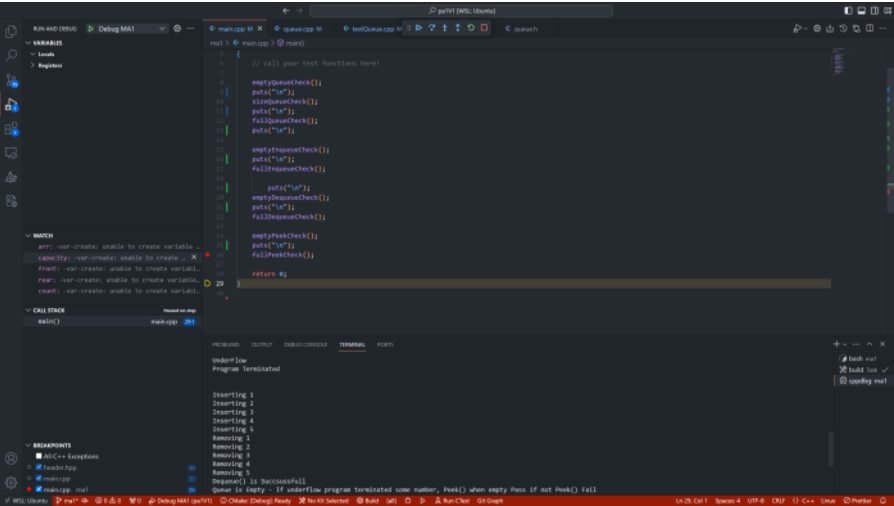
```
Removing 8
Removing 9
Removing 10
Removing 1
Dequeue is Successfull
Removing 1622423833
If peek returns any value, then Peak() has failed. If not then Peek is successfull
UnderFlow
Program Terminated
-2147483648
Inserting 10
If peek returns a value, then Peak() is successfull, if not then Peak() failed
Peak: 1
sri@HarishLaptop:~/source/cpts223/pa1V1/ma1$
```

Peek when non-empty passes test case

Fixing Code



Before it was "return count + 1" resulting in a the size being +1 bigger.



Code is Fixed All test cases pass

Log of Fixed Test Code
Queue is empty - isEmpty() Passed

Inserting 1
Inserting 2
Inserting 3

```
Inserting 4
Inserting 5
Size is 5 - size() Passed
```

```
Inserting 1
Inserting 2
Inserting 3
Inserting 4
Inserting 5
Max Size is 5 isFull() Passed
```

```
Inserting 1
Enqueued Succussfully when Queue is Empty - enqueue() Passed
```

```
Inserting 1
Inserting 2
Inserting 3
Inserting 4
Inserting 5
Queue is Full - If overFlow program terminated, Enqueue() when Full
Pass. If not Enqueue() Fail
OverFlow
Program Terminated
```

```
Queue is Empty - If underFlow program terminated, Dequeue() when Empty
Pass. If not Dequeue() Fail
UnderFlow
Program Terminated
```

```
Inserting 1
Inserting 2
Inserting 3
Inserting 4
Inserting 5
Removing 1
Removing 2
Removing 3
Removing 4
Removing 5
Dequeue() is Succssussfull
Queue is Empty - If underFlow program terminated some number, Peek()
when empty Pass if not Peek() Fail
UnderFlow
Program Terminated
-2147483648
```

```
Inserting 1
Inserting 2
Inserting 3
Inserting 4
Inserting 5
Queue is full - If first value enqueued, Peek() when full Pass if not
Peek() Fail
Peak: 1
```