## CS163 Test Plan

**Develop the test plan:** *For each member function that you plan to write, think about how to test it – what flow of control exists in the member function and how would you test out all conditions:*

|  |  |  |
| --- | --- | --- |
| **Test Case(s)** | **Expected Result** | **Verified?**  **(yes/no)** |
| **Create a route - user tries to enter nothing** | **Return a failed status** |  |
| **Look at route – user doesn’t load anything in the stack and they try to peek** | **Return a failed status** |  |
| **Advance to next route – user tries to pop from an empty stack** | **Return a false Boolean-value to the calling routine and display** |  |
| **IsEmpty (stack) – checks stack that is empty** | **Return a false Boolean-value and display empty list** |  |
| **IsFull (stack) - checks stack that is empty** | **Return a false Boolean-value and display empty list** |  |
| **IsFull (queue) - checks stack that is empty** | **Return a false Boolean-value and display empty list** |  |
| **IsFull (queue) - checks stack that is empty** | **Return a false Boolean-value and display empty list** |  |
| **Enqueue – insert into CLL where one item** | **Return a false Boolean-value and display empty list** |  |
| **Dequeue – user tries to dequeue from an empty CLL** | **Return a false Boolean-value and display empty list** |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Verify correctness:** Using the above test plan, create a test program that tests the interactions of all functions together.