**Lab 1 Solution – Kasaine Kipusi, student #500936268**

**Code for getElem method:**

getElem: anInteger

"Get element from arr at index anInteger, wrapping for out-of-bounds index."

"Declare temporary variables for method."

| end index elem |

"Assign 'end' the value of the size of 'arr'."

end := arr size.

"Assign 'index' the value of the desired index - 1 modulo the size of the array - 1."

"Using modulo gives the desired wrap-around behaviour for out-of-bound indexes."

"Subtracting 1 from 'anInteger' and adding 1 to 'end' accounts for 1-based indexing."

index := (anInteger - 1) \\ end + 1.

"Assign 'elem' the value of the element at the desired index of 'arr'."

elem := (arr at: index).

"Print the desired element to the screen for reference."

Transcript show: 'Element @ Index '; show: anInteger; show: ': '; show: elem; cr.

"Return the desired element."

^ elem.

**Screenshot of Test Case Output:**

