

Demo

- Creating a head as a node
- Creating a scanner to take user input
- Declaring our fixed array
- Creating a loop where it would decrement until the index is lower than 0
 - o Loop will send each individual value of the index and head to Node swapNumber method
- Print the original list to prepare for comparison
- Asking the user which position they want to swap
- Creating a try block just in case user inputs the wrong data type
- Take in the user's input and call a method that will print the list after swapping the number
- Close scanner
- Create a catch block to catch any mismatched input other than integer
 - o Print out Invalid Data Received if invalid input was given
- End program

Node

- Declaring set data given to us
- Creating the printList method that receives a Node as an argument
- Create a temporary variable to hold the head data
- While the temporary value is not the last node, print out the node data
 - o Once the last value has been printed, print null to indicate the end of the node list
- Creating the swapNode method that receives a Node and int as arguments
- While the temporary variable is not the last node, increase the length to indicate the length of the node list and move to the next node
- Create two more node variables that will take become the previous node to the targeted node
- Create a loop for the beginning that will keep looping until it hits the targeted index
 - o Will put its value in a temporary variable
- Create a loop at the end that will keep looping until the nth position at the end as been found
 - o Will put its value in a temporary variable
- If the beginningNode value is not the last node, swap the node value to the endNode temporary variable
- If the endNode value is not the last node, swap the node value to the beginningNode temporary variable
- Time to swap the numbers using the two temporary variables
- If the user inputed index is equal to 1, switch the first node and the last node
- If the user inputed index is equal to the length, switch the last node with the first one