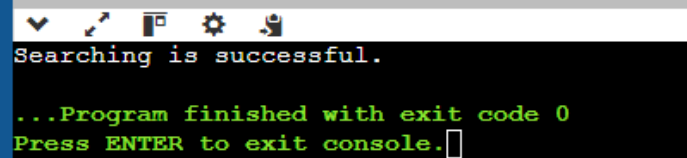
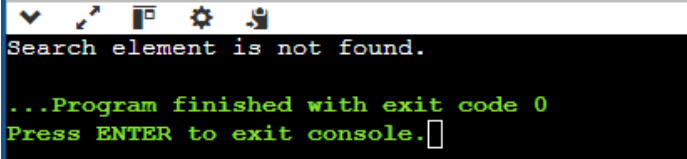



Activity No. 6	
SEARCHING TECHNIQUES	
Course Code: CPE010	Program: Computer Engineering
Course Title: Data Structures and Algorithms	Date Performed: 10 / 15 / 2024
Section: CPE21S4	Date Submitted: 10 / 16 / 2024
Name(s): ROALLOS, Jean Gabriel Vincent G.	Instructor: Prof. Maria Rizette Sayo
6. Output	
Screenshot	
Observations	The code successfully works and the contents of the dataset are randomized every time.
Code	*Code is included in screenshot*
Output	
Observations	The code works as intended and I assigned a randomized value to the item variable and search it within the dataset array.

Code	*Code is included in screenshot*
Output	<pre> 35 Node<char> *name1 = new_node('V'); 36 Node<char> *name2 = new_node('i'); 37 Node<char> *name3 = new_node('n'); 38 Node<char> *name4 = new_node('c'); 39 Node<char> *name5 = new_node('e'); 40 Node<char> *name6 = new_node('n'); 41 Node<char> *name7 = new_node('t'); 42 43 name1->next = name2; 44 name2->next = name3; 45 name3->next = name4; 46 name4->next = name5; 47 name5->next = name6; 48 name6->next = name7; 49 name7->next = NULL; 50 51 linearLS(name1, 'n'); 52 53 54 return 0; </pre> 
Observations	Code worked as intended from initialization of new nodes to searching functions.

Code	*Code is included in screenshot*
Output	<pre> 54 binarySearch(dataset, max_size, 5); 55 56 return 0; 57 } </pre> 
Observations	With the use of the first snippet of code, we used the randomized dataset and searched if 5 would be in the array.

Code	*Code is included in screenshot*
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Output	 <pre>34 35 Node<char> *name1 = new_node('V'); 36 Node<char> *name2 = new_node('I'); 37 Node<char> *name3 = new_node('n'); 38 Node<char> *name4 = new_node('c'); 39 Node<char> *name5 = new_node('e'); 40 Node<char> *name6 = new_node('n'); 41 Node<char> *name7 = new_node('t'); 42 43 name1->next = name2; 44 name2->next = name3; 45 name3->next = name4; 46 name4->next = name5; 47 name5->next = name6; 48 name6->next = name7; 49 name7->next = NULL; 50 51 52 //linearLS(name1, 'n'); 53 54 //binarySearch(dataset, max_size, 5); 55 56 binaryLSearch(name1, 'c'); 57 58 return 0; 59 60 61</pre> <p>Searching is successful.</p> <p>...Program finished with exit code 0</p> <p>Press ENTER to exit console.</p>
Observations	By also using the nodes used and initialized for linear search within the linked list
7. Supplementary Activity	
Supplementary Activities are to follow and submitted through GitHub repository.	
8. Conclusion	
<p>The process of searching through arrays or linked lists was also done to traversing them, which was also done in the past laboratory activities. The matching process however is a somewhat new process I was not entirely familiar. After this activity, I have learned new things about it and using it to arrays and linked lists. However, I was not able to accomplish supplementary activities due to taking time understanding the concepts of the main laboratory activities.</p>	
9. Assessment Rubric	