



School of Computer and Information Science

CSP2204 Data Structures

Solutions to Review Questions 05

Topics: Linked-Lists

1. The reference to the next node in a Single Linked List (SLL) is referred to as a link.
2. True or False: The **length** of a linked list is its number of **links**. **False**
3. True or False: The **length** of a linked list is its number of **nodes**. **True**
4. Given some predetermined sequential order, visiting all the nodes / several contiguous nodes of a SLL is called a traversal of the SLL.
5. Explain why the array-based binary search algorithm is unsuitable for linked lists?
Refer to Page 88 in the textbook for explanation.
6. Analyse the time complexity of Algorithm 4.23 on Page 87 in the textbook.
Time complexity is $O(n)$. Refer to Page 86 in the textbook for explanation.