

Quiz 3

1. What are the differences between a linked list and an array? (2 points)
2. Draw a diagram/picture to present how to remove **a given element** from the following linked list. (4 points)



For example:

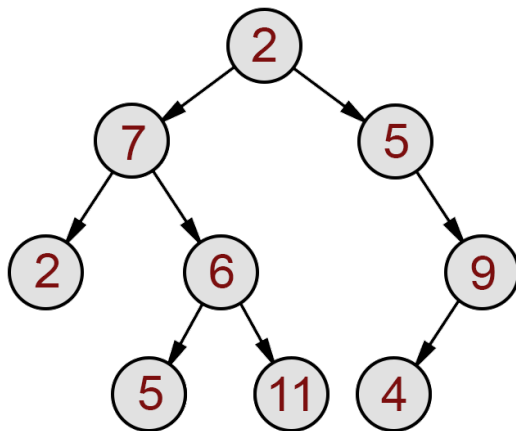
If the given element is 7, i.e., `removeElement(7)`, 7 will be removed from the linked list.

If the given element is 10, i.e., `removeElement(10)`, 10 will be removed from the linked list.

- a. Draw a diagram/picture and explain
- b. Write an algorithm step by step.

Note that you may write the code instead of the algorithm.

3. For the following tree, what will be the output when we travel the tree by Depth First Search (DFS) – inorder. (2 points)



4. Write two examples of real dataset that suitable to be stored in tree. (2 points)