

Pratik Raj

The ADT that we will use for the `pageList` is the `LinkedList` that we've already built previously. The advantages of using `LinkedList` as a `pageList` data structure is that it will only take the space as we add the node to the linked list, if we use array for storing the `pageList` it will always take the maximum space required for storing the pages which is four in our case. Although it will take the extra space required to store the pointer in between the nodes.

The time complexity of accessing the variable will be $O(n)$ in linked list whereas we can access the variable in constant time in case of array.