**Activity about Singly Linked List**

1. **What is a singly linked list, and how does it differ from an array?**  
   A singly linked list is a data structure composed of nodes, where each node contains data and a reference (pointer) to the next node in the sequence. Unlike arrays, which store elements in contiguous memory, linked lists store elements in separate memory blocks connected by pointers. This allows for efficient insertion and deletion, but accessing an element requires sequential traversal from the head.
2. **When would you prefer a linked list over an array, and vice versa?**   
   I chose a linked list because, if you need to add or remove items often especially in the middle it doesn’t require moving everything around. You just need to pick an array if you want to quickly jump to any item or if you already know exactly how many items you’ll have.
3. **How are linked lists used in real-world applications (e.g., browser history, undo functionality)?**  
   Linked lists are used in browser history to navigate forward and backward through pages, in undo/redo features in text editors where each state is a new node, and in memory management systems where memory blocks are dynamically linked.
4. **References**  
   Goodrich, M. T., Tamassia, R., & Goldwasser, M. H. (2018). Data structures and algorithms in Java (6th ed.). Wiley.  
   Cormen, T. H., Leiserson, C. E., Rivest, R. L., & Stein, C. (2022). Introduction to algorithms (4th ed.). MIT Press.