1. **Understand Linked Lists:**
   * **Explain the different types of linked lists (Singly Linked List, Doubly Linked List).**

**Singly Linked List**

A singly linked list is a linear data structure where each node contains two parts:

* **Data:** The actual data to be stored.
* **Next pointer:** A reference to the next node in the sequence.

**Doubly Linked List**

A doubly linked list is similar to a singly linked list, but each node contains three parts:

* **Data:** The actual data to be stored.
* **Next pointer:** A reference to the next node in the sequence.
* **Previous pointer:** A reference to the previous node in the sequence.

1. **Analyze the time complexity of each operation.**

Time complexity for both is O(n).