CS62: Spring 2025 | Lecture #9 (Linked Lists) worksheet | Jingyi Li

```
/** 1. Write the addLast method for doubly linked lists:

 * Inserts the specified element at the tail of the doubly linked list.
 *
 * @param element the element to be inserted
 */
public void addLast(E element) {
    // Create a pointer to tail


    // Make a new node and assign it to tail. Fix pointers.







    // if first node to be added, adjust head to it.


    // else fix next pointer to tail


    // increase number of nodes

}


/** 2. Write the removeLast method for doubly linked lists:

 * Remove and returns the tail of the doubly linked list.
 *
 * @return the tail
 */
public E removeLast() {
```

```
}
```

```java
       /** 3. Write E remove(int index) doubly linked lists:
        * Removes and returns the element at the specified index.
        *
        * @param index
        *            the index of the element to be removed
        * @return the element previously at the specified index
        * @pre 0<=index<size
        */
public E remove(int index) {
// check whether index is valid


// if index is 0, return removeFirst. Else if index is size-1, return removeLast.


// else, make two new Node references, previous and finger. Set previous to null and
finger to head



// search for index-th position. Set previous to finger and move finger to next position




// update pointers for previous and finger



// decrease number of nodes


// return the element that finger points to


}
```