Linked Lists Implementation in Java

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Java program to implement, manipulate and applications using linked lists.

Insertion:

Insert at the beginning.
Insert at the end.
Insert at a specific position.
Insert after a specific node.
Insert before a specific node.

Deletion:

Delete from the beginning.
Delete from the end.
Delete a specific element by value.
Delete a specific element by position.

Traversal and Display:

Traverse and print the elements in the linked list.
Reverse and print the elements in the linked list.

Search and Access:

Search for an element by value.
Access an element by position.

Length and Counting:

Find the length (number of nodes) of the linked list.
Count the occurrences of a specific value in the list.

Sorting and Merging:

Sort the linked list (best sort).

Concatenation:

Concatenate (combine) two linked lists together.

Duplicate Removal:

Remove duplicate elements from a linked list.

Polynomial Representation:

Implement polynomial addition and multiplication using linked lists.

Note: Code snippet for your reference

```
class Node {
   int data;
   Node next;
   public Node(int data) {
      this.data = data;
      this.next = null;
   }
}


class LinkedList {
   Node head;
   public LinkedList() {
      head = null;
   }
```

```
public void insertAtBeginning(int data) {}
public void insertAtEnd(int data) {}
public void insertAtPosition(int data, int position) {}
```