

**Write a program in Java to traverse a doubly linked list in the forward and backward directions**

```
package Practice;
class Nodee {
    int data;
    Nodee prev;
    Nodee next;

    public Nodee(int data) {
        this.data = data;
        this.prev = null;
        this.next = null;
    }
}

public class DoublyLinkedList {
    Nodee head;

    public void insert(int data) {
        Nodee newNode = new Nodee(data);

        if (head == null) {
            head = newNode;
        } else {
            Nodee current = head;
            while (current.next != null) {
                current = current.next;
            }
            current.next = newNode;
            newNode.prev = current;
        }
    }

    public void traverseForward() {
        Nodee current = head;
        while (current != null) {
            System.out.print(current.data + " ");
            current = current.next;
        }
        System.out.println();
    }

    public void traverseBackward() {
        Nodee current = head;
        while (current.next != null) {
            current = current.next;
        }
        while (current != null) {
            System.out.print(current.data + " ");
            current = current.prev;
        }
        System.out.println();
    }

    public static void main(String[] args) {
        DoublyLinkedList dll = new DoublyLinkedList();

        dll.insert(2);
        dll.insert(4);
        dll.insert(6);
        dll.insert(8);

        System.out.println("Forward traversal of Doubly Linked List:");
    }
}
```

```
        dll.traverseForward();  
  
        System.out.println("Backward traversal of Doubly Linked List:");  
        dll.traverseBackward();  
    }  
}
```

## OUTPUT

```
Forward traversal of Doubly Linked List:  
2 4 6 8  
Backward traversal of Doubly Linked List:  
8 6 4 2
```