

**Source Code:**

```
import java.util.Scanner;
class DoublyLinkedList
{
    class node
    {
        int item;
        node previous;
        node next;
        node(int item)
        {
            this.item=item;
        }
    }
    node head,tail=null;
    public void addNode(int item)
    {
        node newNode=new node(item);
        if(head==null)
        {
            head=tail=newNode;
            head.previous=null;
            tail.next=null;
        }
        else
        {
            tail.next=newNode;
            newNode.previous=tail;
            tail=newNode;
            tail.next=null;
        }
    }
    public void deleteNode(int data)
    {
        node temp=head;
        node prev=null;
        if(head==null)
        {
            System.out.println("list is empty");
        }
        else
        {
            while(temp.item!=data)
            {
                prev=temp;
                temp=temp.next;
            }
            prev.next=temp.next;
        }
    }
}
```

```

public void Display()
{
    node Current=head;
    if(head==null)
    {
        System.out.println("list is empty");
    }
    else
    {
        System.out.println("Elements of list are");
        while(Current!=null)
        {
            System.out.println(Current.item+"");
            Current=Current.next;
        }
    }
}
}
public class DLL
{
    public static void main(String[] args)
    {
        Scanner sc = new Scanner(System.in);
        DoublyLinkedList dL=new DoublyLinkedList();
        dL.addNode(10);dL.addNode(20);dL.addNode(30);dL.addNode(40);dL.addNode(50);
        dL.Display();
        System.out.print("Element To Delete : ");
        int data = sc.nextInt();
        dL.deleteNode(data);dL.Display();
    }
}

```

### **Output:**

```

PS E:\Code\Java> cd "e:\Code\Java\Exp14 Doubly Linked List\" ; if ($?) { javac DLL.java } ; if ($?) { java DLL }
Elements of list are
10
20
30
40
50
Element To Delete : 20
Elements of list are
10
30
40
50
PS E:\Code\Java\Exp14 Doubly Linked List>

```