**Problem 06:**

**Implementation of Singly Linked List:**

package practice;

class Node {

public int data;

public Node next;

public void displayNodeData() {

System.out.println("{ " + data + " } ");

}

}

public class SinglyLinkedList {

private Node head;

public boolean isEmpty() {

return (head == null);

}

public void insertFirst(int data) {

Node newNode = new Node();

newNode.data = data;

newNode.next = head;

head = newNode;

}

public Node deleteFirst() {

Node temp = head;

head = head.next;

return temp;

}

public void deleteAfter(Node after) {

Node temp = head;

while (temp.next != null && temp.data != after.data) {

temp = temp.next;

}

if (temp.next != null)

temp.next = temp.next.next;

}

public void insertLast(int data) {

Node current = head;

while (current.next != null) {

current = current.next; // we'll loop until current.next is null

}

Node newNode = new Node();

newNode.data = data;

current.next = newNode;

}

public void printLinkedList() {

System.out.println("Printing LinkedList (head --> last) ");

Node current = head;

while (current != null) {

current.displayNodeData();

current = current.next;

}

System.out.println();

}

}