Task 4:

import java.util.\*;

class SalesRecord {

private String Billnum;

private String CusName;

public SalesRecord(String Billnum, String CusName) {

this.Billnum = Billnum;

this.CusName = CusName;

}

public String getBillnum() {

return Billnum;

}

public String getCusName() {

return CusName;

}

@Override

public String toString() {

return "enter id: " + Billnum + ", Lab Sold: " + CusName;

}

}

class SalesRecordManager {

private LinkedList<SalesRecord> salesRecords = new LinkedList<>();

// Add a record to the salesRecords list

public void addRecord(SalesRecord record) {

salesRecords.add(record); // Append to the end of the list

System.out.println("Record added successfully.");

}

// Delete a record by bill number

public void deleteRecord(String Billnum) {

boolean found = false;

Iterator<SalesRecord> iterator = salesRecords.iterator();

while (iterator.hasNext()) {

SalesRecord record = iterator.next();

if (record.getBillnum().equalsIgnoreCase(Billnum)) {

iterator.remove();

System.out.println("Record deleted successfully.");

found = true;

break;

}

}

if (!found) {

System.out.println("Record not found.");

}

}

// Search for a record by bill number

public void searchRecord(String Billnum) {

for (SalesRecord record : salesRecords) {

if (record.getBillnum().equalsIgnoreCase(Billnum)) {

System.out.println("Record found: " + record);

return;

}

}

System.out.println("Record not found.");

}

// Display all sales records

public void displayRecords() {

if (salesRecords.isEmpty()) {

System.out.println("No records to display.");

} else {

System.out.println("Sales Records:");

for (SalesRecord record : salesRecords) {

System.out.println(record);

}

}

}

}

class MenuDrivenProgram {

public static void main(String[] args) {

SalesRecordManager manager = new SalesRecordManager();

Scanner scanner = new Scanner(System.in);

int choice;

do {

System.out.println("\nMenu:");

System.out.println("1. Add a Lab purchase");

System.out.println("2. Delete a Lab purchase");

System.out.println("3. Display All Lab purchase");

System.out.println("4. Exit");

System.out.print("Enter your choice: ");

choice = scanner.nextInt();

switch (choice) {

case 1:

scanner.nextLine(); // Consume newline

System.out.print("enter id : ");

String Billnum = scanner.nextLine();

System.out.print(" Lab Sold: ");

String CusName = scanner.nextLine();

SalesRecord record = new SalesRecord(Billnum, CusName);

manager.addRecord(record);

break;

case 2:

scanner.nextLine(); // Consume newline

System.out.print("enter id to delete: ");

String deleteBillnum = scanner.nextLine();

manager.deleteRecord(deleteBillnum);

break;

case 3:

manager.displayRecords();

break;

case 4:

System.out.println("Exiting the program. thank you and goodbye!");

break;

default:

System.out.println("Invalid choice. try again.");

}

} while (choice != 4);

scanner.close();

}

}