

## OOPS Lab Exercise 8    14/10/24    ArrayLists and LinkedLists

Q.1 Write Java programs for the following

- a. Define a class FlightDest which contains the flightNo and destination (both of type strings and accessible only within the class FlightDest).

Define another class FlightInfo, which holds a member flightDestList (of type ArrayList) to hold a list of FlightDest objects).

Provide the class FlightInfo, with member functions having the following signatures.

```
public FlightInfo(); // initialize the FlightInfo class
public void addFlightDestPair(String fNo, String dest); // adds the pair (fNo, dest) to the flightDestList
public ArrayList<String> getFlightsDest(String dest); // returns a list of flightNos for a given destination dest.
```

Provide only the class FlightDestinationTester containing the main() method to test the usage of the FlightInfo class.

Q.2 Implement the following:

Book	
-ISBN_no: long  -name: String  -Edition: int  -Author: String  -Publisher: String  -Status: int	
+check_Status()  +change_Status()  +display()	
Note:  1. - indicates private access specifier, + indicates public access specifier  2. +check_Status(): a method to find status of the book.	

Status can be:

Available (0)

Issued (1)

Reserved (2)

3. +change\_Status(int): a method to change the status of the book.

4. +display(): a method to print the details of the book.

Create a class BookTester to include main method. Create 2 objects of Book in this main method and call methods to change and check status. Now add two more book objects, one at the first location and the next in the last location. Use LinkedList to manipulate the objects.

1 \$vi BookTester.java

```
class Book {  
  
}  
  
public class BookTester {  
  
    public static void main(String[] args) {  
        // Read Input from user. and test the Book class.  
    }  
}
```

\$javac BookTester.java

\$java BookTester