SENG 201 Data and Game Structures

Lab Assignment 2

In this assignment you will write a simple airline ticket reservation program, that will display a menu with the following options:

- Reserve a ticket.
- Cancel a reservation.
- Check whether a ticket is reserved for a particular person.
- List all reservations.

You are expected to design and implement a program holding information for each reservation. Reservations should contain:

- Flight No: string
- Person Name: string

Hint: You can make use of the following libraries:

- `import java.util.Scanner`
- `import java.util.LinkedList`
    - please read the documentation of java LinkedList from:
      https://docs.oracle.com/en/java/javase/17/docs/api/java.base/java/util/LinkedList.html

Check the following program outputs for different menu selections:

```
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Enter the number from the menu:
1. Reserve a ticket
2. Cancel reservation
3. Check reservation
4. List all reservations
5. Exit
----------------------------
```
Menu

```
1

Enter the flight number: 100
Enter the person name: John
Reservation is added successfully
```
Reserve a ticket.

```
2

Enter the flight number: 100
Enter the person name: John
Flight is removed successfully
```

```
2

Enter the flight number: 300
Enter the person name: Michael
No flight is found
```

Cancel reservation.

```
3

Enter the flight number: 100
Enter the person name: John
Flight exists
```

```
3

Enter the flight number: 300
Enter the person name: Michael
No flight is found
```

Check reservation.

```
4

The flights:
1: Flight Number: 100, Person: John
2: Flight Number: 200, Person: Mary
```

List all reservations.

You should submit one zip file name as **"YourNameSurname_Lab2.zip"** and it should contain all the java files you created!