

JUnit4 Output: It compiled successfully, all tests passed with no issues.

The screenshot shows the Eclipse IDE interface. The top bar has tabs for Flight.java, FlightTest.java, Ticket.java, Passenger.java, Member.java, NonMember.java, and Manager.java. Below the tabs, the Source tab is selected, displaying the code for FlightTest.java. The code includes imports for org.junit.* and annotations for @BeforeClass, @AfterClass, and @Test. The class contains a constructor, a static setup method, and a static teardown method. The bottom part of the interface shows the Test Results view for lab1.FlightTest, which displays a green bar indicating "Tests passed: 100.00%" and a list of 18 passed tests: setDepartureTime, testInvalidConstructor, getNumberOfSeatsLeft, getDestination, setOrigin, setCapacity, getCapacity, getOrigin, getDepartureTime, and testConstructor.

```
package lab1;
import org.junit.After;
import org.junit.AfterClass;
import org.junit.Before;
import org.junit.BeforeClass;
import org.junit.Test;
import static org.junit.Assert.*;

/**
 * 
 * @author Isaac Zheng (501263130)
 */
public class FlightTest {
    //Instance Variable
    private Flight flight;
    public FlightTest() {
    }
    @BeforeClass
    public static void setUpClass() {
    }
    @AfterClass
    public static void tearDownClass() {
    }
}
```

lab1.FlightTest > testInvalidConstructor

Notifications Test Results Output - coe528Lab1 (test)

lab1.FlightTest

All 18 tests passed. (0.138 s)

Tests passed: 100.00%

setDepartureTime
testInvalidConstructor
getNumberOfSeatsLeft
getDestination
setOrigin
setCapacity
getCapacity
getOrigin
getDepartureTime
testConstructor

Manager Class Output: Everything 100% worked with no issues.

*Note all output possibilities will not be shown here because of way too many possibilities

1. Output with everything perfect and a >5yr membership

The screenshot shows the Eclipse IDE interface with the Manager class open. The Notifications, Test Results, and Output tabs are visible. The Output tab shows the console output for a run named "coe528Lab1 (run) #2". The output displays a series of prompts and user inputs for creating two flights. For Flight 1, the user enters: Number of Flights: 2, Flight Number: 101, Origin: Toronto, Destination: Tokyo, Departure Time: 14/01/2025 6:42 am, Capacity: 100, and Original Price: 1050. For Flight 2, the user enters: Flight Number: 102, Origin: Toronto, Destination: Seoul, Departure Time: 15/02/2025 6:43 am, Capacity: 150, and Original Price: 1360.00.

```
run:
Enter Number of Flights:
2
Enter Info for Flight 1
Flight Number:
101
Origin:
Toronto
Destination:
Tokyo
Departure Time:
14/01/2025 6:42 am
Capacity:
100
Original Price:
1050
Enter Info for Flight 2
Flight Number:
102
Origin:
Toronto
Destination:
Seoul
Departure Time:
15/02/2025 6:43 am
Capacity:
150
Original Price:
1360.00
```

```
Enter Your origin:  
Toronto  
Enter Your Destination:  
Tokyo  
Displayed available flights from Toronto to Tokyo:  
Flight 101, Toronto to Tokyo, 14/01/2025 6:42 am, Original Price: $1050.00  
Enter flight number:  
101  
Enter name:  
Peter Griffin  
Enter age:  
34  
Are you a member (y/n)?:  
y  
Enter membership years:  
6  
Flight Booked.  
Peter Griffin, Flight 101, Toronto to Tokyo, 14/01/2025 6:42 am, Original Price: $1050.00, Ticket Price: $525.00  
BUILD SUCCESSFUL (total time: 43 seconds)
```

2. User enters nonexistent flight

```
Source History < > Find Test Results Output x  
adtmanager main flightnumber  
Notifications Test Results Output x  
  
coe528Lab1 (run) x coe528Lab1 (run) #2 x  
  
run:  
Enter Number of Flights:  
1  
Enter Info for Flight 1  
Flight Number:  
333  
Origin:  
Toronto  
Destination:  
New York  
Departure Time:  
05/12/2024 9:21 pm  
Capacity:  
50  
Original Price:  
650  
Enter Your origin:  
Toronto  
Enter Your Destination:  
New York  
Displayed available flights from Toronto to New York:  
Flight 333, Toronto to New York, 05/12/2024 9:21 pm, Original Price: $650.00  
Enter flight number:  
444  
No flight found  
BUILD SUCCESSFUL (total time: 42 seconds)
```

3. Flight is overbooked and no seats are left

```
Notifications Test Results Output x
coe528Lab1 (run) x coe528Lab1 (run) #2 x

run:
Enter Number of Flights:
1
Enter Info for Flight 1
Flight Number:
666
Origin:
Toronto
Destination:
Detroit
Departure Time:
04/03/2022 10:32 am
Capacity:
0
Original Price:
999.99
Enter Your origin:
Toronto
Enter Your Destination:
Detroit
Displayed available flights from Toronto to Detroit:
None Available
BUILD SUCCESSFUL (total time: 29 seconds)
```