

**Name:**Siddhant Singh Karki

**StudentID:** s8091542

**Test Case 1: Creating and Displaying Flight Objects**

<b>Flight 1</b>	
<b>Airline Name</b>	"ABC Airlines"
<b>Flight Number</b>	"ABC123"
<b>Flight Origin</b>	"New York"
<b>Destination City</b>	"London"
<b>Airfare</b>	\$500.00
<b>Departure Time</b>	08:00
<b>Arrival Time</b>	16:00
<b>Distance</b>	3500 miles
<b>Aircraft Type</b>	"Boeing 747"
<b>Pilot Name</b>	"John Smith"
<b>Max Passengers</b>	300

<b>Flight 2</b>	
<b>Airline Name</b>	"XYZ Airlines"
<b>Flight Number</b>	"XYZ789"
<b>Flight Origin</b>	"Paris"
<b>Destination City</b>	"Tokyo"
<b>Airfare</b>	\$800
<b>Departure Time</b>	12:30
<b>Arrival Time</b>	21:30
<b>Distance</b>	6000 miles
<b>Aircraft Type</b>	"Airbus A380"
<b>Pilot Name</b>	"Emma Johnson"
<b>Max Passengers</b>	500

## Entering Details of Flight 1:

```
Description: few clouds
General Condition: cloudy
Temperature: 21.43°C
Enter the number of flights:
2
Enter the details of the Flight 1:
Airline Name:
ABC Airlines
Flight Number:
ABC123
Flight Origin:
New York
Destination City:
London
Airfare:
100
Departure Time (HH:mm:ss):
08:00
Invalid Departure Time format. Please enter a valid Departure Time (HH:mm:ss).
Departure Time (HH:mm:ss):
08:00:00
Arrival Time (HH:mm:ss):
16:00:00
Distance:
1500
Aircraft Type:
Boeing 747
Pilot Name:
John Smith
Max Passengers:
100
Enter the details of the Flight 2:
```

## Entering Details of Flight 2:

Enter the details of the Flight 2:

Airline Name:

*XYZ Airlines*

Flight Number:

*XYZ789*

Flight Origin:

*Paris*

Destination City:

*Tokyo*

Airfare:

*800*

Departure Time (HH:mm:ss):

*12:30:00*

Arrival Time (HH:mm:ss):

*21:30:00*

Distance:

*6000*

Aircraft Type:

*Airbus A380*


Pilot Name:

*Emma Johnson*

Max Passengers:

*500*

**Displaying Flight Details on GUI:**



Description: few clouds

Temperature: 21.43°C

Aircraft Type

Boeing 747  
Airbus A380

Pilot Name

John Smith  
Emma Johnson

Max Passengers

300  
500

Display Flights

Flight Details:

Airline Name:

ABC Airlines  
XYZ Airlines

Flight Number

ABC123  
XYZ789

Origin->Destination:

New York to London  
Paris to Tokyo

Airfare

500.0  
800.0

Departure Time

08:00  
12:30

Arrival Time

16:00  
21:30

Distance

3500.0  
6000.0

**Test Case 2:**  
**Displaying Sort Functionality:**

<b>Flight 1</b>	
<b>Airline Name</b>	"ABC Airlines"

<b>Flight Number</b>	"ABC123"
<b>Flight Origin</b>	"New York"
<b>Destination City</b>	"London"
<b>Airfare</b>	\$500.00
<b>Departure Time</b>	08:00
<b>Arrival Time</b>	16:00
<b>Distance</b>	3500 miles
<b>Aircraft Type</b>	"Boeing 747"
<b>Pilot Name</b>	"John Smith"
<b>Max Passengers</b>	300

<b>Flight 2</b>	
<b>Airline Name</b>	"XYZ Airlines"
<b>Flight Number</b>	"XYZ789"
<b>Flight Origin</b>	"Paris"
<b>Destination City</b>	"Tokyo"
<b>Airfare</b>	\$800
<b>Departure Time</b>	12:30
<b>Arrival Time</b>	21:30
<b>Distance</b>	6000 miles
<b>Aircraft Type</b>	"Airbus A380"
<b>Pilot Name</b>	"Emma Johnson"
<b>Max Passengers</b>	500

<b>Flight 3</b>	
<b>Airline Name</b>	"PQR Airlines"

<b>Flight Number</b>	"DEF456"
<b>Flight Origin</b>	"Los Angeles"
<b>Destination City</b>	"Sydney"
<b>Airfare</b>	\$1100.00
<b>Departure Time</b>	22:15
<b>Arrival Time</b>	23:59
<b>Distance</b>	7800 miles
<b>Aircraft Type</b>	"Boeing 787"
<b>Pilot Name</b>	"Ethan Johnson"
<b>Max Passengers</b>	280

<b>Flight 4</b>	
<b>Airline Name</b>	"MNO Airlines"
<b>Flight Number</b>	"GHI234"
<b>Flight Origin</b>	"Dubai"
<b>Destination City</b>	"New York"
<b>Airfare</b>	\$800
<b>Departure Time</b>	17:30
<b>Arrival Time</b>	22:30
<b>Distance</b>	6800 miles
<b>Aircraft Type</b>	"Airbus A350"
<b>Pilot Name</b>	"Sophia Thompson"
<b>Max Passengers</b>	420

**Displaying Pre-Sorted Flight Details:**

### Pre-sorted Flight Details:

#### Flight Details:

Airline Name: ABC Airlines  
Flight Number: ABC123  
Flight Origin: New York  
Destination City: London  
Airfare: \$500.0  
Departure Time: 08:00  
Arrival Time: 16:00  
Distance: 3500.0 miles  
Aircraft Type: Boeing 747  
Pilot Name: John Smith  
Max Passengers: 300

#### Flight Details:

Airline Name: XYZ Airlines  
Flight Number: XYZ789  
Flight Origin: Paris  
Destination City: Tokyo  
Airfare: \$800.0  
Departure Time: 12:30  
Arrival Time: 21:30  
Distance: 6000.0 miles  
Aircraft Type: Airbus A380  
Pilot Name: Emma Johnson  
Max Passengers: 500

#### Flight Details:

Airline Name: PQR Airlines  
Flight Number: DEF456  
Flight Origin: Los Angeles  
Destination City: Sydney  
Airfare: \$1100.0  
Departure Time: 22:15  
Arrival Time: 07:50:50

Flight Details:

Airline Name: PQR Airlines

Flight Number: DEF456

Flight Origin: Los Angeles

Destination City: Sydney

Airfare: \$1100.0

Departure Time: 22:15

Arrival Time: 23:59:59

Distance: 7800.0 miles

Aircraft Type: Boeing 787

Pilot Name: Ethan Johnson

Max Passengers: 280

Flight Details:

Airline Name: MNO Airlines

Flight Number: GHI234

Flight Origin: Dubai

Destination City: New York

Airfare: \$800.0

Departure Time: 18:30

Arrival Time: 22:30

Distance: 6800.0 miles

Aircraft Type: Airbus A350

Pilot Name: Sophia Thompson

Max Passengers: 420



## Displaying Sorted Flight Details:

Sorted Flight Details [ascending]:

### Flight Details:

Airline Name: ABC Airlines  
Flight Number: ABC123  
Flight Origin: New York  
Destination City: London  
Airfare: \$500.0  
Departure Time: 08:00  
Arrival Time: 16:00  
Distance: 3500.0 miles  
Aircraft Type: Boeing 747  
Pilot Name: John Smith  
Max Passengers: 300

### Flight Details:

Airline Name: PQR Airlines  
Flight Number: DEF456  
Flight Origin: Los Angeles  
Destination City: Sydney  
Airfare: \$1100.0  
Departure Time: 22:15  
Arrival Time: 23:59:59  
Distance: 7800.0 miles  
Aircraft Type: Boeing 787  
Pilot Name: Ethan Johnson  
Max Passengers: 280

### Flight Details:

Airline Name: MNO Airlines  
Flight Number: GHI234  
Flight Origin: Dubai  
Destination City: New York  
Airfare: \$800.0  
Departure Time: 10:30

Flight Details:

Airline Name: MNO Airlines

Flight Number: GHI234

Flight Origin: Dubai

Destination City: New York

Airfare: \$800.0

Departure Time: 18:30

Arrival Time: 22:30

Distance: 6800.0 miles

Aircraft Type: Airbus A350

Pilot Name: Sophia Thompson

Max Passengers: 420

Flight Details:

Airline Name: XYZ Airlines

Flight Number: XYZ789

Flight Origin: Paris

Destination City: Tokyo

Airfare: \$800.0

Departure Time: 12:30

Arrival Time: 21:30


Distance: 6000.0 miles

Aircraft Type: Airbus A380

Pilot Name: Emma Johnson

Max Passengers: 500

## Displaying Sorted Details on GUI:



Description: few clouds

Temperature: 21.28°C

Aircraft Type

Boeing 747  
Boeing 787  
Airbus A350  
Airbus A380

Pilot Name

John Smith  
Ethan Johnson  
Sophia Thompson  
Emma Johnson

Max Passengers

300  
280  
420  
500

Flight Details:

Airline Name:

ABC Airlines  
PQR Airlines  
MNO Airlines  
XYZ Airlines

Flight Number

ABC123  
DEF456  
GHI234  
XYZ789

Origin->Destination:

New York to London  
Los Angeles to Sydne  
Dubai to New York  
Paris to Tokvo

Airfare

500.0  
1100.0  
800.0  
800.0

Departure Time

08:00  
22:15  
18:30  
12:30

Arrival Time

16:00  
23:59:59  
22:30  
21:30

Distance

3500.0  
7800.0  
6800.0  
6000.0

Display Flights

## Sorted List Structure:

Flight 1 (Flight Number: "ABC123")

Flight 3 (Flight Number: "DEF456")

Flight 4 (Flight Number: "GHI234")

Flight 2 (Flight Number: "XYZ789")