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// Flight Class

package com.flight;

public class Flight {

    private int flightNumber;
    private String origin;
    private String destination;
    private static int seatAvailabel;

    public Flight(int flightNumber, String origin, String destination, int seatAvailabel) {
        this.flightNumber = flightNumber;
        this.origin = origin;
        this.destination = destination;
        Flight.seatAvailabel = seatAvailabel;
    }

    public int getFlightNumber() {
        return flightNumber;
    }

    public String getOrigin() {
        return origin;
    }

    public String getDestination() {
        return destination;
    }

    public int isSeatAvailabel() {
        return seatAvailabel;
    }

    void displayFlightInformation() {
        System.out.println("Flight No      : " + this.flightNumber);
        System.out.println("Flight Origin   : " + this.origin);
        System.out.println("Flight Destination : " + this.destination);
        System.out.println("Seats Available   : " + Flight.seatAvailabel);
    }

    void checkSeatAvailable() {
        int check = Flight.seatAvailabel;
        if (check > 0) {
            System.out.println(check + " seats are availabel !");
        } else {
            System.out.println("Sorry Our Flight is Full !");
        }
    }

    void bookFlight(int seatsBooked) {
        if (seatsBooked > 0 && (Flight.seatAvailabel - seatsBooked) > 0) {
            System.out.println(seatsBooked + " are Booked !");
            System.out.println("Happy Journey !");
            Flight.seatAvailabel -= seatsBooked;
            checkSeatAvailable();
        } else {
            System.out.println("You Cannot Book " + seatsBooked + " Seats !");
            System.out.println("Only " + Flight.seatAvailabel + " are Available !");
        }
    }

    void cancelBooking(int seatsCancelld) {
        if (seatsCancelld > 0 && seatsCancelld <= (Flight.seatAvailabel - seatsCancelld)) {
            System.out.println(seatsCancelld + " are Cancelld !");
            Flight.seatAvailabel += seatsCancelld;
            checkSeatAvailable();
        } else {
            System.out.println("Enter Valid Data !");
        }
    }
}
```

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// Flight System Class

package com.flight;

public class FlightSystem extends Flight {

    public FlightSystem(int flightNumber, String origin, String destination, int seatAvailabel) {
        super(flightNumber, origin, destination, seatAvailabel);
    }

    public static void main(String[] args) {

        Flight f = new Flight(101, "Mumbai", "Pune", 20);
        f.displayFlightInformation();

        System.out.println();
        f.bookFlight(14);
        System.out.println();
        f.bookFlight(10);
        System.out.println();

        f.cancelBooking(2);
        System.out.println();
        f.cancelBooking(3);
        System.out.println();

        f.checkSeatAvailable();
    }
}

// Output

Flight No      : 101
Flight Origin  : Mumbai
Flight Destination : Pune
Seats Available : 20

14 are Booked !
Happy Journey !
6 seats are availabel !

You Cannot Book 10 Seats !
Only 6 are Available !

2 are Canceled !
8 seats are availabel !

3 are Canceled !
11 seats are availabel !

11 seats are availabel !

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