abstract class Flight {

String flightNumber, origin, destination;

double baseFare;

public Flight(String flightNumber, String origin, String destination, double baseFare) {

this.flightNumber = flightNumber;

this.origin = origin;

this.destination = destination;

this.baseFare = baseFare;

}

abstract double calculateFare();

public void displayDetails() {

System.out.println("Flight Number: " + flightNumber);

System.out.println("Route: " + origin + " to " + destination);

System.out.println("Base Fare: Rs " + baseFare);

}

}

class DomesticFlight extends Flight {

static final double domesticTaxRate = 0.10;

public DomesticFlight(String flightNumber, String origin, String destination, double baseFare) {

super(flightNumber, origin, destination, baseFare);

}

@Override

double calculateFare() {

return baseFare + (baseFare \* domesticTaxRate);

}

@Override

public void displayDetails() {

super.displayDetails();

System.out.println("Total Fare (Domestic): Rs " + calculateFare());

}

}

class InternationalFlight extends Flight {

static final double internationalTaxRate = 0.20;

double immigrationFee;

public InternationalFlight(String flightNumber, String origin, String destination, double baseFare, double immigrationFee) {

super(flightNumber, origin, destination, baseFare);

this.immigrationFee = immigrationFee;

}

@Override

double calculateFare() {

return baseFare + (baseFare \* internationalTaxRate) + immigrationFee;

}

@Override

public void displayDetails() {

super.displayDetails();

System.out.println("Immigration Fee: Rs " + immigrationFee);

System.out.println("Total Fare (International): Rs " + calculateFare());

}

}

public class FlightManager {

public static void main(String[] args) {

Flight[] flights = new Flight[2];

flights[0] = new DomesticFlight("IND123", "Delhi", "Mumbai", 3000);

flights[1] = new InternationalFlight("INT456", "Delhi", "London", 20000, 3500);

double totalFare = 0;

for (Flight flight : flights) {

System.out.println("====================================");

flight.displayDetails();

totalFare += flight.calculateFare();

}

System.out.println("\nTotal Fare for All Flights: Rs " + totalFare);

}

}

