

Class Guest

```
public class Guest {
    public int guestId;
    public String name;
    public String nationality;
    public int age;

    public Guest(int guestId, String name, String nationality, int age) {
        this.guestId = guestId;
        this.name = name;
        this.nationality = nationality;
        this.age = age;
    }
    public int getGuestId() {
        return guestId;
    }
    public String getName() {
        return name;
    }
    public String getNationality() {
        return nationality;
    }
    public int getAge() {
        return age;
    }
    public void displayGuestInfo() {
        System.out.println("Guest ID: " + guestId);
        System.out.println("Guest name: " + name);
        System.out.println("Guest nationality: " + nationality);
        System.out.println("Guest age: " + age);
    }
}
```

Class Hotel

```
public class Hotel {
    private String name;
    private Guest arrGuests[];
    private int nbGuests;

    public Hotel(int size, String name) {
        this.name = name;
        arrGuests = new Guest[size];
        nbGuests = 0;
    }
    public boolean addGuest(Guest g) {
        if(nbGuests == arrGuests.length)
            return false;
        arrGuests[nbGuests++] = g;
        return true;
    }
    public int countGuests(String n) {
        int counter = 0;
        for(int i = 0; i < nbGuests; i++) {
            if(arrGuests[i].getNationality().equalsIgnoreCase(n))
                counter++;
        }
        return counter;
    }
    public Guest getOldestGuest() {
        Guest oldest = arrGuests[0];
        for(int i = 1; i < nbGuests; i++) {
            if(arrGuests[i].getAge() > oldest.getAge())
                oldest = arrGuests[i];
        }
        return oldest;
    }
    public Guest[] getGuests(String n) {
        int size = countGuests(n);
        if(size == 0)
            return null;
        Guest temp[] = new Guest[size];
        int count = 0;
        for(int i = 0; i < nbGuests; i++) {
            if(arrGuests[i].getNationality().equalsIgnoreCase(n))
                temp[count++] = arrGuests[i];
        }
        return temp;
    }
}
```

```
public int splitGuests(Guest[] saudi, Guest expat[]) {
    int countS = 0;
    int countE = 0;
    for(int i = 0; i < nbGuests; i++) {
        if(arrGuests[i].getNationality().equalsIgnoreCase("Saudi"))
            saudi[countS++] = arrGuests[i];
        else
            expat[countE++] = arrGuests[i];
    }
    return countE;
}
}
```