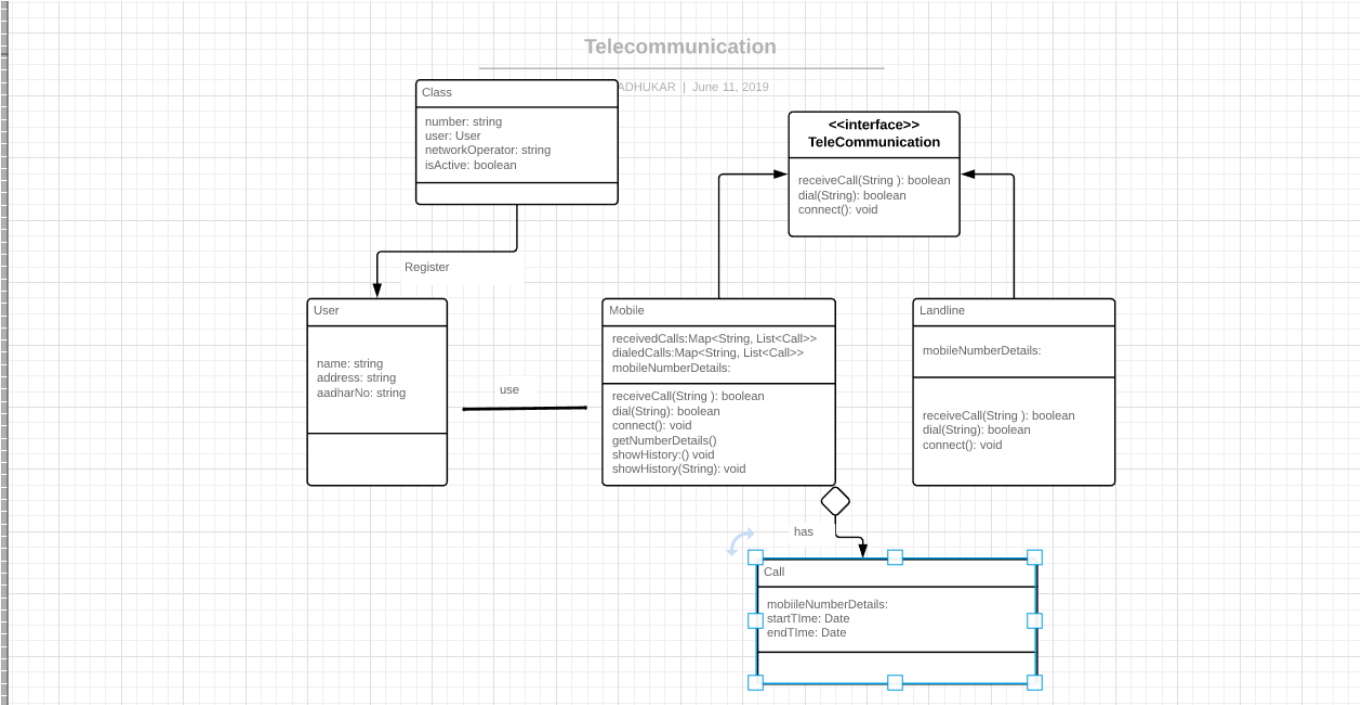# JAVA ASSIGNMENT

Exercise -1

Implement a system to simulate a telephone using OOPS concepts. User Should be able to use functions like : Store its properties, Dial and call, Receive calls, Cancel calls, Store and view call History.

Class Diagram

```
[sourceFile->JavaAssignment1.java]
```


Interfaces

```
    Telecommunication
```

Classes

```
    Mobile
    Call
    User
    PhoneNumber
```
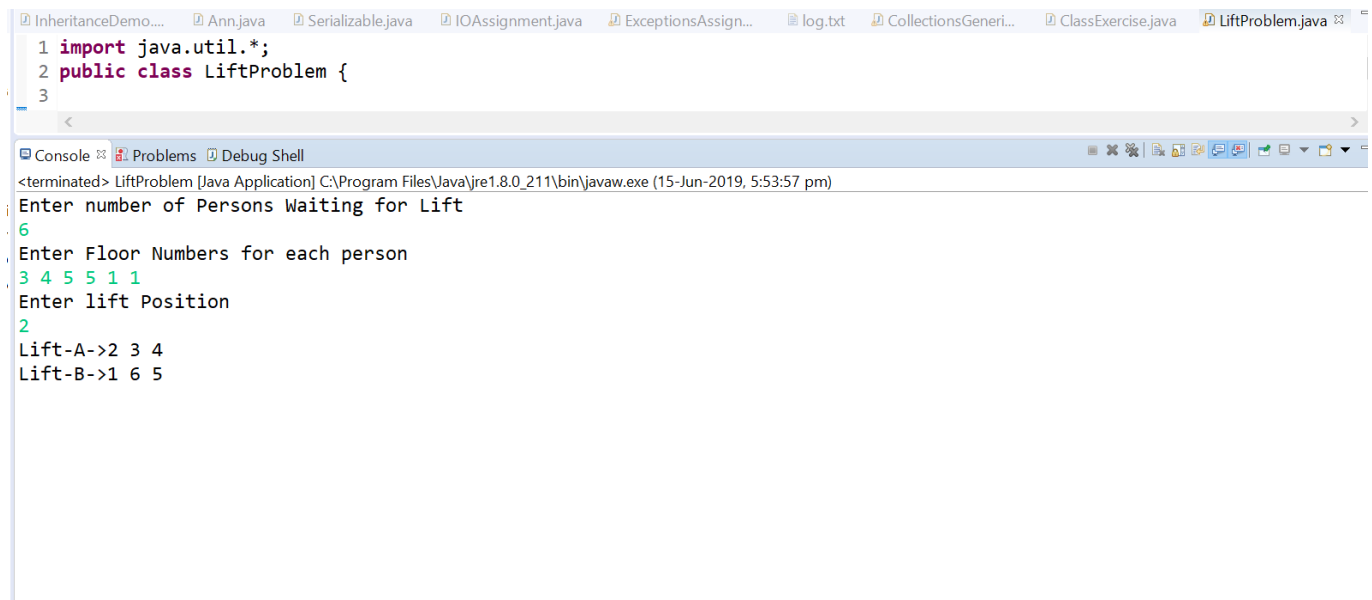
Relationships

```
Mobile implements Telecommunication interface
User "uses" mobile
mobile "have" calls(one-to-many)
PhoneNumber "Assigns" to a User (many-to-one)
```

Exercise-2

1. Implement a lift system. There are 2 lifts (A, B) and 5 floors (1 – 5) The user should give preference of UP/DOWN and floor No.Assume all users enter at same floor, x are viven initially at the time of each request.

```
1.The users must be divided equally if possible
among each lift.
2.Each user must travel minimal to get to their
location
3. Output: List of users for Lift A and B. Order of exit
from lift for each
```

SAMPLEOUTPUT()

| InheritanceDemo.... | Ann.java | Serializable.java | IOAssignment.java | ExceptionsAssign... | log.txt | CollectionsGeneri... | ClassExercise.java | LiftProblem.java |
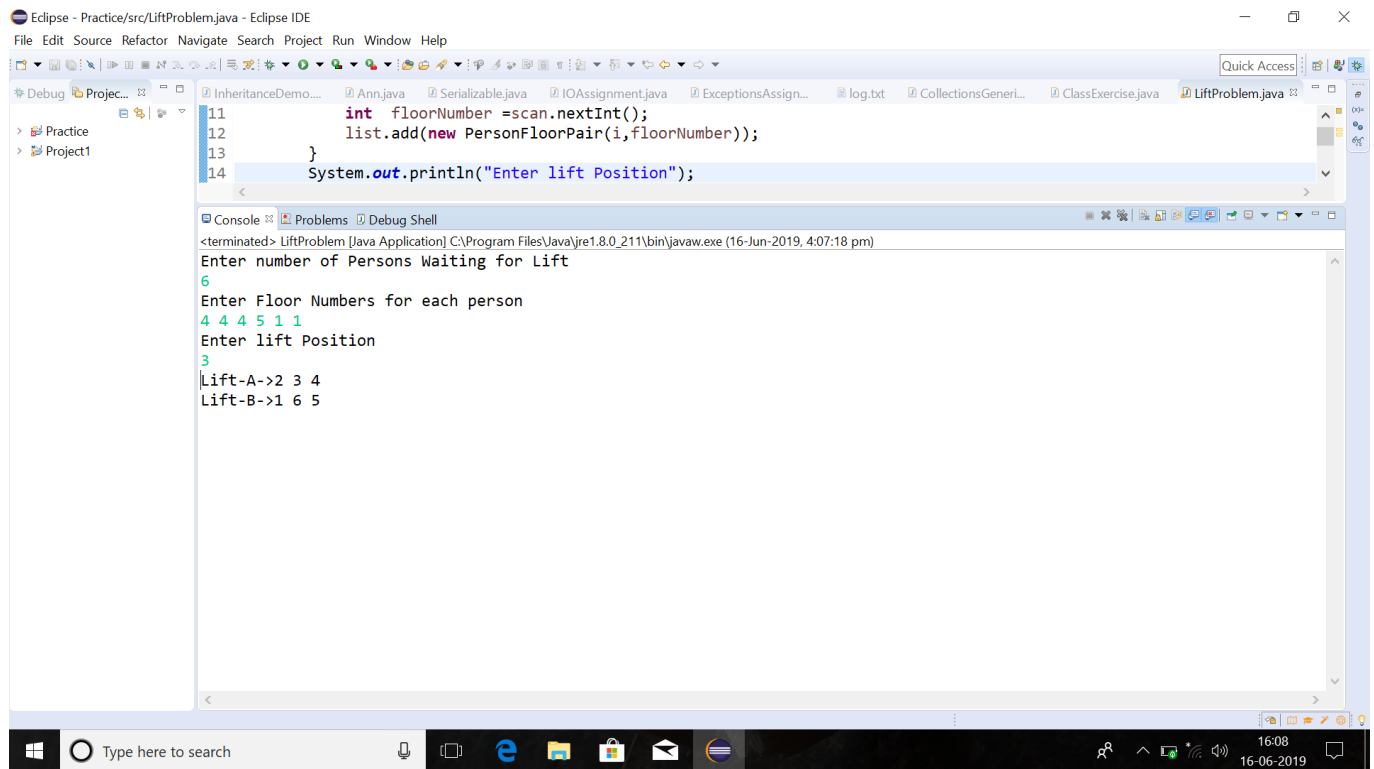
```java
1 import java.util.*;
2 public class LiftProblem {
3
```

Console   Problems   Debug Shell

<terminated> LiftProblem [Java Application] C:\Program Files\Java\jre1.8.0_211\bin\javaw.exe (15-Jun-2019, 5:53:57 pm)

```
Enter number of Persons Waiting for Lift
6
Enter Floor Numbers for each person
3 4 5 5 1 1
Enter lift Position
2
Lift-A->2 3 4
Lift-B->1 6 5
```

```
[source->LiftProblem.java]
```
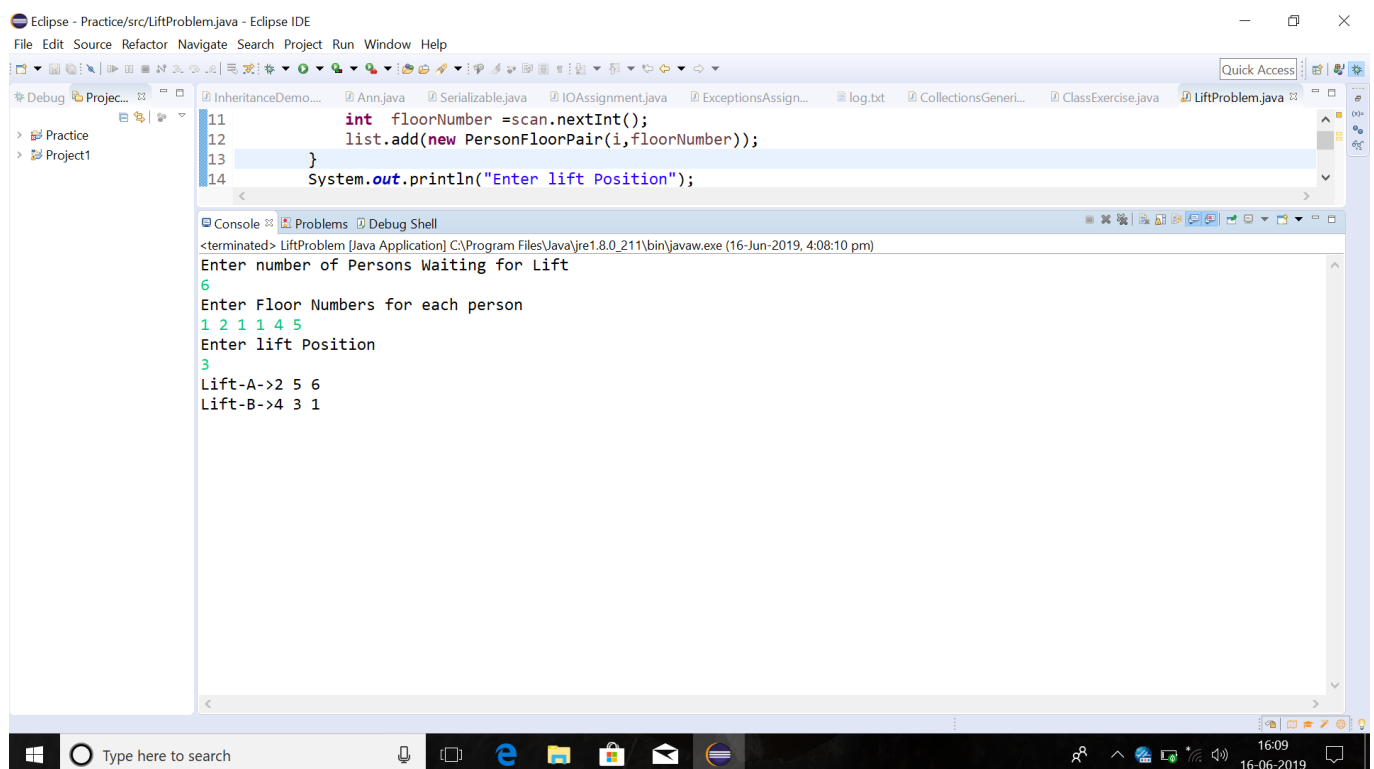
One Edge-Case (more members going up)

Second-Edge case(more members going down)