

# My intercom system

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```

public class IntercomSystem {

    private List<Flat> flats;
    private Flat currentFlat;
    private int pin;

    public IntercomSystem(int pin) {
        this.flats = new ArrayList<>();
        this.pin = pin;
    }

    public IntercomSystem(List<Flat> flats, int pin) {
        this.flats = flats;
        this.pin = pin;
    }

    public void addFlat(Flat flat) {
        flats.add(flat);
    }

    public void inputPin(int pin){
        if (pin == this.pin){
            System.out.println("Door is open");
        }
        else{
            System.out.println("Wrong PIN");
        }
    }

    public void selectFlat(int flatNumber) {
        for (Flat flat : flats) {
            if (flat.getNumber() == flatNumber) {
                this.currentFlat = flat;
                break;
            }
        }
    }

    public void makeCall() {
        this.currentFlat.receiveCall();
    }

    public void answerCall() {
        this.currentFlat.answerCall();
    }

    public void endCall() {
        this.currentFlat.endCall();
    }
}

```

# Class Intercom

```
public class Flat {  
  
    private int number;  
    private boolean callReceived;  
    private String name;  
  
    public Flat(int number, String name) {  
        this.number = number;  
        this.name = name;  
        this.callReceived = false;  
    }  
  
    public int getNumber() {  
        return this.number;  
    }  
  
    public void receiveCall() {  
        this.callReceived = true;  
    }  
  
    public void answerCall() {  
        if (this.callReceived) {  
            System.out.println("Call to flat " + this.number + " in progress");  
        }  
    }  
  
    public void endCall() {  
        if (this.callReceived) {  
            System.out.println("Call to flat " + this.number + " ended");  
            this.callReceived = false;  
        }  
    }  
}
```

# Class Flat

```
import java.util.ArrayList;
import java.util.Arrays;
import java.util.List;

public class Main{
    public static void main(String[] args) {

        IntercomSystem intercom = new IntercomSystem(1234);

        intercom.addFlat(new Flat(1, "Smith"));
        intercom.addFlat(new Flat(2, "Johnson"));
        intercom.addFlat(new Flat(3, "Williams"));
        intercom.addFlat(new Flat(4, "Miller"));

        intercom.selectFlat(3);
        intercom.makeCall();
        intercom.answerCall();
        intercom.inputPin(1234);
        intercom.endCall();

    }
}
```

# main