MobilePhone
- manufactureName: String - model: String - contacts: List<String>
+ updateModel(String): void + recordName(String): void

: MobilePhone
- manufactureName = “Samsung” - model = “GT-55360” - contacts = [ ]
+ updateModel(String): void + recordName(String): void

```
Person p1 = new Person(“Rain”);
MobilePhone m1 = new MobilePhone(“Samsung”);
M1.setOwner(p1);
```

Exercise 2:

Person
- id: int - name: String - mobilePhones: List<MobilePhone> (the first design)
+ greet(): void + shakeHand(Person): void + addMobilePhone(MobilePhone): void + removeMobilePhone(MobilePhone): void + getMobilePhones(): List<MobilePhone>

P1: Person
- id = 1 - name = “Rain” - mobilePhone = MobilePhone <manuName = “Samsung”
+ greet(): void + shakeHand(Person): void

MobilePhone
- manufactureName: String - model: String - contacts: List<String> - owner: Person (the second design)
+ updateModel(String): void + recordName(String): void + getOwner(): Person + setOwner(Person): void

: MobilePhone
- manufactureName = “Samsung” - model = “GT-55360” - contacts = [ ]
+ updateModel(String): void + recordName(String): void

Exercise 3:

Arrays
+ <s> countNegatives(int[]): int + <s> min(int[]): int + <s> ascending(int[]): int + <s> length(int[]): int + <s> Frequency(int[]): int

Arrays
-element: int[]
+ <s> countNegatives(int[]): int + <s> min(int[]): int + <s> ascending(int[]): int + <s> length(int[]): int + <s> Frequency(int[]): in

: Arrays
-elements = [2, -5, 4, -3, 1]
+ <s> countNegative(int[]): int + <s> min(int[]): int + <s> ascending(int[]): int + <s> length(int[]): int + <s> Frequency(int[]): in

Exercise 4:

Benefits of the OOp Arrays I designed over the procedural version:

- Ease problem solving
- Enhance modularity
- Increase reuse and ease program maintenance