

(3 marks) Write a class **Coffee** with the following information:

| Coffee |
|---|
| -name:String -size:int |
| +Coffee () +Coffee (name:String, size:int) +getName():String +getSize():int +setName(name:String):void +setSize(size:int):void |

Where:

- getName():String – return name.
- getSize():int – return size.
- setName(name:String): void – update name.
- setSize(size:int): void – update size.

The interface **ICoffee** below is already compiled and given in byte code format, thus **you can use it without creating ICoffee.java file**.

```
import java.util.List;
public interface ICoffee {
    public int f1(List<Coffee> t);
    public void f2(List<Coffee> t);
    public void f3(List<Coffee> t);
}
```

Write a class **MyCoffee**, which implements the interface **ICoffee**. The class **MyCoffee** implements methods **f1**, **f2** and **f3** in **ICoffee** as below (you can add other functions in **MyCoffee** class):

- **f1**: Count and return number of elements whose name doesn't contain the character 'A' or character 'B'.
- **f2**: Remove the first element whose size is minimum.
- **f3**: Sort the first 3 elements of the list **t** ascendingly by unit digit of size (e.g. if size=123 then unit digit = 3).

When running, the program will add some data to the list. Sample output might look something like:

| | |
|--|--|
| Add how many elements: 0 Enter TC(1-f1;2-f2;3-f3): 1 The list before running f1: (A,3) (B,7) (CAB,6) (D,7) (E,6) OUTPUT: 2 | Add how many elements: 0 Enter TC(1-f1;2-f2;3-f3): 2 The list before running f2: (A,6) (B,9) (C,2) (D,9) (E,2) (F,9) (G,2) OUTPUT: (A,6) (B,9) (D,9) (E,2) (F,9) (G,2) |
|--|--|

```
Add how many elements: 0
Enter TC(1-f1;2-f2;3-f3): 3
The list before running f3:
(H,19) (G,213) (E,8) (F,47) (E,56) (C,65) (B,74) (A,83)
OUTPUT:
(G,213) (E,8) (H,19) (F,47) (E,56) (C,65) (B,74) (A,83)
```