



These slides will be modified after the class of today!

Exercise

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Preamble

Java offers numerous way to define collections

The most used and easiest to use is **`ArrayList<type>`**

Preamble

For example:

```
ArrayList<String> aCollection = new ArrayList<>();  
aCollection.add("Hello ");  
aCollection.add("C3002");  
for(String s : aCollection) {  
    System.out.print(s);  
}
```

Preamble exercise

Write a short Java program that manipulate collections

The class C has three methods:

`fill(ArrayList<Integer>)` to add numbers in the collection

`print(ArrayList<Integer>)` to print the collection

A main method to run an example

You can use random numbers in fill:

`new Random().nextInt(42)`

Exercise

The University decided as ask *you* to design a new computational system to handle students, auxiliares, professors and ramos

We will go through *two different steps*:

- 1 - Design ramos
- 2 - Design students, auxiliares, professors

Designing ramos

A ramo has *one professor* in charge of the lecture, some *auxiliares*, and some *students*

How would you *design* ramos?

What would be the *motivations* of your design?

What are the *positive* and *negative* aspects of your design?

What would be the *responsibilities* of a ramo object?

Designing People

A student can be part of several ramos

An auxiliar can be a student

How would you design your system?

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