

DP2

Exercises for refreshing Java programming

These exercises are about the use of files, collections and dates/times in Java. The solutions to these exercises are not to be submitted.

Exercise 1

Write a Java program that:

- a) loads the rows of a text file called `dictionary.txt`, using a `Collection` (you are free to choose the specific type to use) of `String` objects (one object per row);
- b) reads the rows of a second text file, whose name is passed as argument on the command line, and writes the rows of the second file that do not occur in the first one to standard output.

Exercise 2

Write a Java program that reads a text file whose name is assigned to the system property `it.polito.dp2.file` and whose rows are each made up of a series of six integers representing a time instant in the local time zone (the integers are, respectively, hour, minute, second, day, month and year). Such data must be loaded into objects of type `GregorianCalendar`. After loading, the program must print the most recent date to standard output.

In order to read a system property you can use the `System.getProperty()` method like in the following example:

```
// Get the "it.polito.dp2.file" system property
String dir = System.getProperty("it.polito.dp2.file");
```

A system property can be set or overridden by specifying the `-D` option to the java command when running your program, as in the following example:

```
$ java -Dit.polito.dp2.file="filename" MyApp
```

Exercise 3

Write a Java program that reads two files, and merges them into a single third file with the lines ordered in ascending alphabetic order.

The names of the files must be read from the command line.