

EDA - Second Lab Exam (ETSIInf) - Academic Year 2015-16.

3 June, 2016. **Turn 1.** Duration: 45 minutes

NAME:

LAB GROUP:

Details, instructions and rules for this lab session under exam conditions.

- You may exclusively use the lab material available on your Linux *DSIC* account. **YOU WILL NOT BE ABLE** to use tablets, laptops, phones, USB drives, e-mail or other electronic devices during the exam. **YOU WILL NOT have Internet access** during the exam (no email, no Web-surfing, no Dropbox, no *PoliformaT*, etc.).
- You must have in the *DiscoW* directory of your home directory (*Carpeta Personal* or *home*) the *BlueJ eda* project that contains the packages structure and the classes that you developed during the lab activities carried out so far.
- This exam consists of two exercises described below, that you have to solve and submit exclusively with the programs (`.class` files) that we provide you. Therefore, you have **not** to use the e-mail or a *PoliformaT* tool (as *Tests & Quizzes* or *Assignments*) to explicitly submit your solutions. You may submit as many solutions as you want but **only your last submission** is the one that will be used for your grade, even if this submission does not result in the highest score; independently of the grade received, your lab teacher can re-evaluate your solution and, when necessary, adjust your score accordingly.
- You have to do (in this order) the following:

1. Open *BlueJ* and create a new package called *prueba2* in your *eda* project. This done, **exit** *BlueJ*.
2. Copy into your *prueba2* directory (that corresponds to the *BlueJ* package you have just created) the three following files available in the *asigDSIC/ETSINF/eda/prueba2* folder of your home directory (*Carpeta Personal* or *home*): `TestPractsENG.class`, `T1EjercicioENG.class` and `CorrectorEx.class`.
3. Open *BlueJ* once again and you will see in its package *eda/prueba2* the three peculiar icons of classes `TestPractsENG`, `T1EjercicioENG` and `CorrectorEx`, which have the phrase (*no source*) at the bottom to indicate that they can only be executed.

Note: if you cannot see these icons it is because your *eda* project contains one or more classes that have not been compiled yet or aren't placed correctly (wrong name or wrong package).

4. Exercise 1 (3 points):

Execute the `main` method of the `TestPractsENG` class in order to test the correctness of the code (of some classes) you have developed during the last two lab activities.

Note: Code that does not compile **will not** be graded!

5. Exercise 2 (7 points):

solve the exercise that appears on the screen when running the `main` of the `T1EjercicioENG` class.

In the `Grafo` class, write a method that, given a vertex `v` of a `Graph`, returns the furthest vertex from `v` on a shortest path, i.e. the vertex with the largest shortest path distance from `v`.

The header of the method must be as follows:

```
/**Precondition: 0 <= v < numVertices() */ public int masLejosDe(int v)
```

After solving the exercise, click the *Send solution* button.