

## 1 Task

Use your creativity to extend any of the exercises below (from class 5). Choose only one exercise.

- Write a program that composes a melody of 10 notes using the chromatic scale and reproduces it in 60bpm.
- Write a program that makes a 2D drawing of the models of the Hydrogen and Helium atoms at the screen.

To build a valid extension you need to write some extra lines of code, and not only change values, and you need to add some new feature to the program. Examples:

- Make the music composition more complex, using different time signatures or asking the user with desired parameters.
- Draw models of other atoms at the screen.

Tip:

- If you are going for a complex feature or plan to add several features, implement it one-by-one and ensure you have a good-working version between each step.

## 2 Groups

You may work in pairs or alone.

## 3 Delivery

Until November, 8th, 2019 23:59, via e-mail [wbombardellis@gmail.com](mailto:wbombardellis@gmail.com). A zip file containing the Netbeans project with the source-code (.java files). The zip file's name must contain your first and last names.

## 4 Evaluation

The grade will be given using the following schema:

- 70% Code correctness: Compiles and runs correctly.
- 20% Creativity: Added features
- 10% Presentation: Code organization/ indentation
- Plagiarism implies invalid solution.
- Late delivery implies that you get only 70% of the grade.