Programming Technology (Tecnología de la Programación) - Curso 2015/2016 Grado en Ingeniería Informática/Computadores/Software, Doble Grado en Matemáticas-Informática September's Exam (02/09/2016) - Duration: 2 hours

Maximum grade: 5 points (out of the final grade)

**PART 1 (3 points)** ConnectN+ is a game similar connectN in which the pieces are placed differently: instead of placing a piece in a specific cell, we only indicate in which column we want to place it, and then it is placed in the lowest free cell in that column (i.e., pieces fall down to the lowest empty cell). The other rules are exactly the same as ConnectN.

- 1. Add a package connectNplus inside assignment4 with the required classes for playing ConnectN+ in console mode.
- Modify examSep.Main in order to to play connectN+ when using the command-line option "-g cnp".
- 3. Add a package connectNplus inside assignment5 with the required classes for playing ConnectN+ in window mode. Recall that the game should work in the client-server mode as well.

PART 2 (2 points) You are required to modify the behavior of the random player in all games (only in the window mode) to the following: when the user asks to make a random move, if the condition "Utils.randInt(10) >= N" is true, then we do a random move as before, otherwise we pass the turn to the next player without making any move. Add a combo-box in the Swing window with the values 0 to 9 for selecting the value of N. Note that this behavior should work correctly both when the user clicks the random move button and when the player's mode is changed to random.