Homework 1 – Due Mar. 13th 23:59, KST

Instructions: Complete the program and turn it in before the due date. Any deviations from the instructed deliverable format will result in a deduction of grade. No late submission for this assignment will be accepted. DO NOT COPY OTHER'S WORKS!

As your first programming assignment, you will create a very simple board game engine. There's nothing fancy about this game engine, as you will be responsible for implementing the simplest operations only. The purpose of this assignment is to help you understand what it means to manage data in an OOP fashion without the help of existing data structures. As such, you must not use any external packages, and doing so will result in zero credit.

Your task is to build a game engine for the games of Go (https://en.wikipedia.org/wiki/Rules_of_Go) and Chess (https://en.wikipedia.org/wiki/Rules_of_chess). In particular, each game should be based on the abstract definition of the board given by the GridPlayable interface. You will need to figure out how to use this interface (as well as other two supplementary classes) to build the respective classes. Please refer to the comments provided in the skeleton code of Board.java to complete the necessary implementation.

In addition to the base implementation, you are asked to provide a test code demonstrating the usage of those created classes in the main() method. There are instructions on how this test code should behave in the body of the main() method.

Start early! Do not wait a few days before getting started, so you have ample time to get help if needed.

Deductions

- Every unhandled exception and error will be worth -10 points. 2 or more such errors will give you a score of 0 for correctness.
- Importing and declaring a package: -10 points each, even if you don't use the imported package(s). You should habitually double-check your code before submission.
- All other deductions will be computed by an automated grading script.

Deliverables

- A single Board.java file containing your name and SBU ID in the top-most comment. Do NOT use any package structures (i.e., no package declaration in the top).