Gebze Institute of Technology
Department of Computer Engineering
CSE 241/501
Object Oriented Programming
Fall 2015
Homework # 5
Due date Nov 25th 2015

In this homework, you will modify your **Reversi** and **Cell** classes of HW4 to make them work with operator overloading.
For the **Cell** class, overload the following operators

- operators <, >, >= , >=, == and != for comparing two **Cell**s. One **Cell** object is smaller than the other if the Y components is smaller. If Y components are equal, then check the X component.
- Operators ++ and - - that increment and decrement the X and Y components by one. Overload both prefix and postfix operators.
- Stream insertion and extraction operators

For the **Reversi** class, you will overload the following operators

- Operator++ (both posfix and prefix) will advance the game by one step for computer. It will return the expected results.
- Operator- - (both posfix and prefix) will undo the game by one step for the last play (user or computer). It will return the expected results. You can undo all the game moves back to the beginning of the game. (Hint: you will need to think about this operator a little).
- Overload the [] operator such that if g is a **Reversi** object, g["A5"] will return the **Cell** at row 5 and column A. If there is no such **Cell**s, then it will return a new **Cell** with position (-1000,-1000).
- Operator() with two parameters behaves exactly the same as g["A5"].
- Operator+= that takes another a Cell object and plays the game for the user.
- Stream insertion operator that prints the game on the screen

Write your main function to test new classes. Make at least 5 objects of class **Reversi** and show the results of each operator overload.