ASSIGNMENT 2

In this assignment you will write a program to play the game Connect Four.

DEADLINE
This assignment is due on Wednesday, Nov 13 at 11:00 pm.

DESCRIPTION
Connect four is a popular game played by dropping checkers into a vertical grid with six rows and seven columns. The checkers can be dropped in any of the seven columns (permitted they are not full). Once dropped, the checker falls to the lowest unoccupied space. The winner is the first player to occupy four consecutive spaces in a straight line, either horizontal, vertical, or diagonal.

SPECIFICATIONS
In this project you will write a program to play Connect Four using a two-dimensional array of integers to represent the grid and a Picture object to display the game. You will create a class called ConnectFour to represent the game. The class PlayConnectFour (provided) will allow the user to play the game. When run, this program will display the game board and ask the user to specify a column. The user is always player 1 (red checkers) and goes first. After the user enters a column the opponent will select a column for their piece.

For this project you will create a simple naive opponent that selects a column at random. Then the program will update and repaint the board and ask the user to select another column. This will repeat until the game ends in a win, loss, or draw.

To help with this project a Referee class is provided. The referee will look at your grid and tell you whether the game is a win, loss, draw, or is not finished.
ICLICKER QUESTION

Are you here now?

A. Yes
B. No
C. Maybe
D. No
E. Definitely Not

UNDERFULL ARRAY

• Create an underfull array to store elements in a dynamic collection
• Grow the array when full
• Use an array of objects to store any type
• Cast back to type when returning
• See examples Course.java, DynamicArray.java