

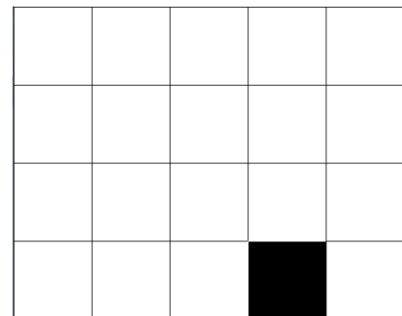
2012/10/30 Software Studio Lab 4

Black/White Chess Board

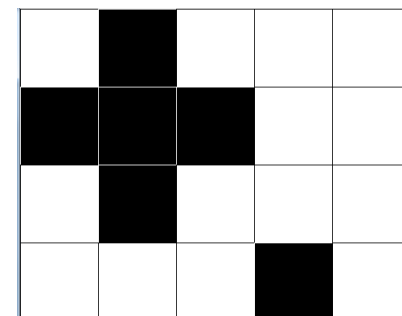
Honor Code

Any cheating will be handled seriously in compliance with the university rules. All assigned work is expected to be individual, except where explicitly written otherwise (e.g., term project). You are encouraged to discuss with your classmates; however, what you hand in should be your own work.

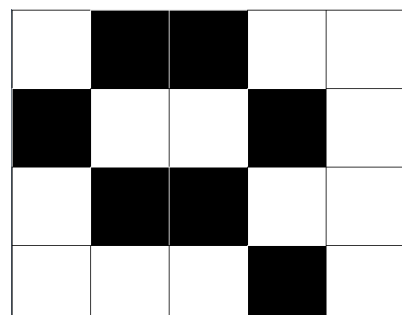
(100%) In this assignment, you will create a chess board game in which the winning condition is that all the cells are colored black. Please follow the specification below to create the game. Create a **5 (columns)*4 (rows)** chess board as the figure shows. After launching the program, the initial condition is that one randomly selected cell is colored black and all the rest of cells are white. For example, the (4,4) cell is randomly selected at the beginning to be black.



The user may interact with the board by clicking any cells of it. When clicking a cell, the cell will switch its color. If it's white, it will turn black. If it's black, it will turn white. All adjacent cells will switch their color too. For example, by clicking cell (2,2) as the figure shows, cells (2,1), (1,2), (3,2), and (2,3) also change the color.



Then, if the user clicks cell (3,2), the cell has to switch to white because it was black before this action. Similarly, the adjacent cells have to switch color again based on the rule. As a result, cells (3,1), (4,2), (3,3) switch to black, and cell (2,2) switches to white.



If all squares are black, then the game hits the end.

The program will print words like "You Win!!" on the panel (You have to clear the panel and print the text).

