**Connect Four**

**Description:**

Write a program that will allow two players to play Connect Four. The program should prompt the player whose turn it is to pick a column in which to drop their chip (red or black). The program should keep track of player moves in a 6x7 numerical array, and determine when a player wins or when game ends with no winner. If a player has won, the program should display who the winner is. Review the rules for Connect Four.

**An Added Challenge:**

Write the winner code efficiently; that is, rather than checking for all possible wins on the board each time a player makes a move, only check for possible wins based on the player’s specific move. For example, if a player drops a chip in column 1, there is no need to look at anything sitting in columns 5-7.

**Suggestion for Adding Graphics:**

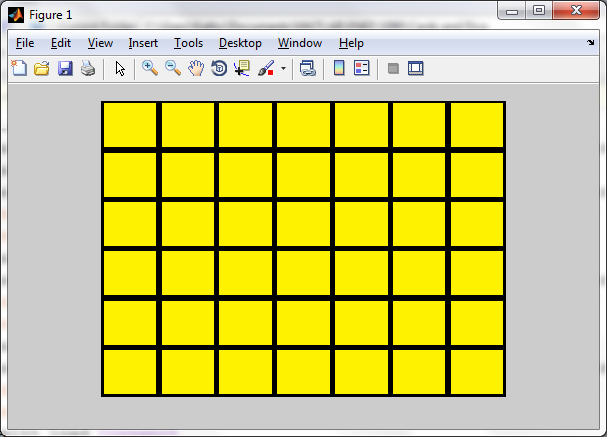
Save the Connect.mat file to your current MATLAB folder (the folder in which you will write your game program. Try out the following commands in the command window to understand how they work. Then incorporate them into your game program.

load Connect

% Loads Board (6x7 cell array), a redchip block, and a blackchip block

imshow([Board{1,:};Board{2,:};Board{3,:};Board{4,:};Board{5,:};Board{6,:}])

% Shows the initial board – 6 rows and 7 columns – initially empty (yellow)



Note: If you dock the figure by clicking on the arrow, it will stay on the screen the entire time for viewing.

The command:

figure('WindowStyle','docked')

works also.

Displaying Player moves:

Board{6,1}=redchip;

imshow([Board{1,:};Board{2,:};Board{3,:};Board{4,:};Board{5,:};Board{6,:}])

% Player 1 drops Red chip in Col 1 which drops down to row 6



Board{6,2} = blackchip;

imshow([Board{1,:};Board{2,:};Board{3,:};Board{4,:};Board{5,:};Board{6,:}])

% Player 2 drops Black chip in Col 2 which drops down to row 6



Board{5,1}=redchip;

imshow([Board{1,:};Board{2,:};Board{3,:};Board{4,:};Board{5,:};Board{6,:}])

% Player 1 drops Red chip in Col 1 which drops down to row 5

