CS49C: Section 1, Fall 2015
Program #3: Connect Four (100 Points)
Due Date: Nov 24, 2015

Description:

You are responsible to implement the Connect Four game ->https://en.wikipedia.org/wiki/Connect_Four. You will prompt for the user for the number of players, either 1 or 2. For the 2 players case, you will prompt each user to make a move alternately on the column # (1-7). You will display the board after each move. The board will be drawn on the command line as a 7 x 6 matrix of 1's and 2's. Put a 0 on an empty spot. Player 1 will always have 1's and player 2 will always have 2's.

For example: After 3 moves - player 1 inputted 4; player 2 inputted 5; player1 inputted 5

```
After 3 moves:
0 0 0 0 0 0 0
0 0 0 0 0 0 0
0 0 0 0 0 0 0
0 0 0 0 0 0 0
0 0 0 0 1 0 0
0 0 0 1 2 0 0
```

Once a player has 4 1's or 0's in a row (horizontally, vertically, or diagonally). Then you declare the winner.

For the 1 player versus the computer scenario, computer will always make the first move. Thus computer has 1's and player has 2's. Since the computer moves first, your program should not lose to the human player in the first 20 moves. Otherwise 15 points will be taken off.

Program Specification:

```
Your Connect Four board is a 7 x 6 matrix of integers that you initialized to 0s.

Int connect_4 [7][6];    /* make this global – declared outside of main */

Int insert_board (int column, int value)

  Column is the user input – 1 to 7

  Value is either 1 or 0 depending on the player #

  RETURN – 1 if it was the winning move and 0 if it was not.

Int next_move ()  /* You will have your game strategy logic within this function */

  RETURN – the next column # when the computer is ready for the next move
```

Program Checklist:

You will submit p3.c files and readme.p3.