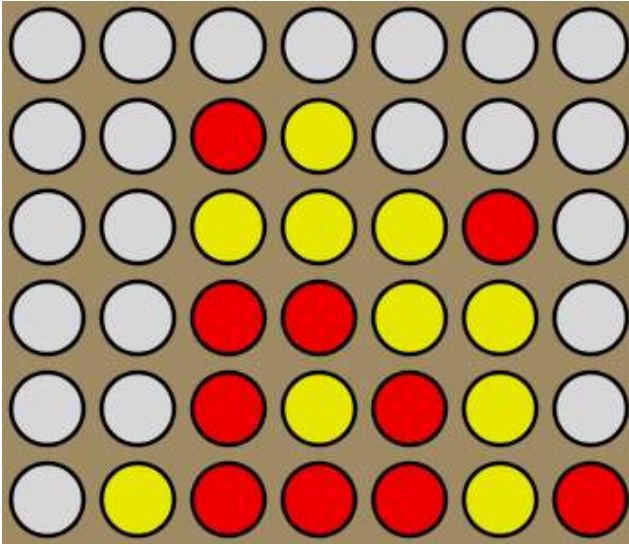


Project 3
CSC 202

Connect Four

Objective: Gain greater experience with two-dimensional arrays

Connect four is a two-player board game in which the players alternately drop colored disks into a seven-column, six-row vertically suspended grid, as shown below.



The objective of the game is to connect four same-colored disks in a row, a column, or a diagonal before your opponent can do likewise. The program prompts two players to drop a red or yellow disk alternately. Whenever a disk is dropped, the program redisplay the board on the console and determines the status of the game (win, draw, or continue).

Instructions:

1. Display your name.
2. Red starts first.
3. While the game is continuing do the following:
 - a. Display the current status of the board.
 - b. Prompt the correct player (red or yellow) to choose a column (0-6).
 - c. Only accept 0-6. Anything else simply prompts the same user again.
 - d. If that column is already filled indicate that and prompt the same user again.
 - e. If the position is acceptable then do the following:
 - i. check for a draw or win. If it is a draw or win indicate who won or that it is a draw and end the game.
 - ii. If it is not a draw or win rotate whose turn it is.

Example:

Robert Ball

Drop a red disk at column (0-6):

0

R							

Drop a red disk at column (0-6):

3

R		Y					

Drop a red disk at column (0-6):

...

			R				
			Y R Y				
		R Y Y Y Y					
R Y R Y R R R							

Yellow player wins!

NOTE: I will have a file called “project1.txt” of 50 random numbers. The numbers in the above example will NOT be what is in the file. So, the correct answers will differ from my above example.

Rubrics:

Points	Items
1	Name is shown
1	Board is shown
2	User can input the column number and it shows up at the correct location
1	If user inputs invalid number then the program does not crash
1	If user inputs invalid number then the program does not keep going to the next turn
2	User can win and/or draw correctly
1	The game correctly takes turns
1	Programmer used at least 3 methods

NOTE: If you do not use a 2-dimensional array then you do not get credit for the program.