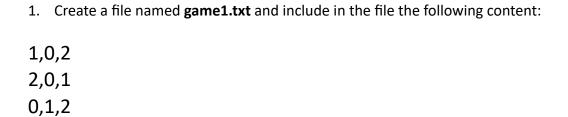
CSCI-101 Programming 1

Lab 11

Create a lab11 directory and put all of the files for this lab in the lab11 directory.



- 2. Create a file named game2.txt and include in the file the following content:
- 1,0,2
- 2,2,2
- 0,1,2
- 3. Create a file named **game3.txt** and include in the file the following content:
- 1,0,2
- 2,2,2
- **2**,1,0

- 4. Write a class named **Lab11** in your **lab11** directory that contains the following:
 - A method named **printMatrix** that takes a 2D array of integers as an argument and prints each row of elements (array) in the 2D array on a separate line with spaces between the elements.
 - A method named **checkRows** that has 2 parameters. The first parameter is a 2D array of integers named **matrix** and the second parameter is an integer named **val**. The method returns true if all of the values in any row of **matrix** are set to the value in **val**; otherwise the method returns false.
 - A method named **checkColumns** that has 2 parameters. The first parameter is a 2D array of integers named **matrix** and the second parameter is an integer named **val**. The method returns true if all of the values in any column of **matrix** are set to the value in **val**; otherwise the method returns false.
 - A method named **checkDiagonals** that has 2 parameters. The first parameter is a 2D array of integers named **matrix** and the second parameter is an integer named **val**. The method returns true if all of the values in any diagonal of **matrix** are set to the value in **val**; otherwise the method returns false.
 - A method named main that does the following:
 - Declares a 3x3 2D array of integers named gameBoard.
 - Ask the user to enter a file name. Read the value from the keyboard, and store the value in a variable named fileName.
 - Reads the integers in the file whose name is in the variable fileName and stores the integers in gameBoard.
 - Print the contents of gameBoard to the screen using printMatrix.

// Check to see if gameBoard has all 2's in any row

- Call **checkRows**, passing to the method **gameBoard** and the value **2**. Save the value returned by the method in a variable named **foundWinningRow**.
- Print to the screen "Found winning row: " followed by the value in **foundWinningRow.**

// Check to see if gameBoard has all 2's in any column

- Call **checkColumns**, passing to the method **gameBoard** and the value **2**. Save the value returned by the method in a variable named **foundWinningColumn**.
- Print to the screen "Found winning column: " followed by the value in foundWinningColumn.

// Check to see if gameBoard has all 2's in any diagonal

- Call **checkDiagonals**, passing to the method **gameBoard** and the value **2**. Save the value returned by the method in a variable named **foundWinningDiagonal**.
- Print to the screen "Found winning diagonal: " followed by the value in foundWinningDiagonal.
- 5. Test your program using game1.txt, game2.txt, and game3.txt. Verify that your program works properly.