

**Lab Goal :** This lab was designed to teach you how to use a matrix, an array of arrays.

**Lab Description :** Read in the values for a tic tac toe game and evaluate whether X or O won the game. The first number in the files represents the number of data sets to follow. Each data set will contain a 9 letter string. Each 9 letter string contains a complete tic tac toe game.

### Sample Data :

```
5
XXXOXXOO
OXOOXOXO
OXOXXOXO
OXXOXOXO
XOXOOXXO
```

# of data sets in the file - 5

### Files Needed ::

```
TicTacToe.java
TicTacToeRunner.java
tictactoe.dat
```

### Sample Output :

```
X X X
O O X
X O O
X wins horizontally!
```

```
O X O
O X O
X O X
cat's game - no winner!
```

```
O X O
X X O
X O O
O wins vertically!
```

```
O X X
O X O
X O O
X wins diagonally!
```

```
X O X
O O O
X X O
O wins horizontally!
```

### algorithm help

The determineWinner method goes through the matrix to find a winner. It checks for a horizontal winner first. Then, it checks for a vertical winner. Lastly, it checks for a diagonal winner. It must also check for a draw. A draw occurs if neither player wins.

You will read in each game from a file and store each game in a matrix. The file will have multiple games in it.