## CS 42 C++ Programming Essentials:

Project TicTacToe:

Activity 0: Draw TicTacToe Game Board.

- 1. Please download the activity0.zip from piazza.com or eCodeHacker.com course C++ Programming Essentials TicTacToe project (after chapter 11).
- 2. Make sure you understand

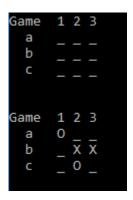
```
tictactoe.cpp:
```

```
1 #include <iostream>
 2 #include "Board.h"
 3 using namespace std;
 4
 5 Board b;
 7 □ int main(int argc, char** argv) {
        b.draw();
 8
9
        b.set(1, 1, Board::X);
        b.set(2, 1, Board::0);
10
11
        b.set(1, 2, Board::X);
        b.set(0, 0, Board::0);
12
13
        cout << endl << endl;</pre>
14
        b.draw();
15
        return 0;
16 L }
```

## Board.h:

```
1 #ifndef BOARD_H
 2 #define BOARD H
 3 #define ROW 3
 4 #define COLUMN 3
 5 □ class Board{
        public:
 6
 7
           static const char X = 'X';
 8
           static const char 0 = '0';
 9
           static const char S = '_';
10
           Board(){}
11
           char get(int row, int col);
12
           void set(int row, int col, char sym);
13
           void draw();
14
        private:
15
           int rows = ROW;
16
           int columns = COLUMN;
17
           // unused cell set to underline first, then space for bebugging purpose
           char cell[ROW][COLUMN]={
18 🗦
19
             {S, S, S},
20
             {S, S, S},
21
             {S, S, S}
22
           };
23 <sup>L</sup> };
24 #endif
```

3. Please write the Board.cpp to complete this activity. (Note: there are more activity to complete this project.) So, that the program execution result will looks like this:



## Note:

Practice the following ideas:
 2D array, class, class variable accessed at main program, display of 2D array, writing member methods.