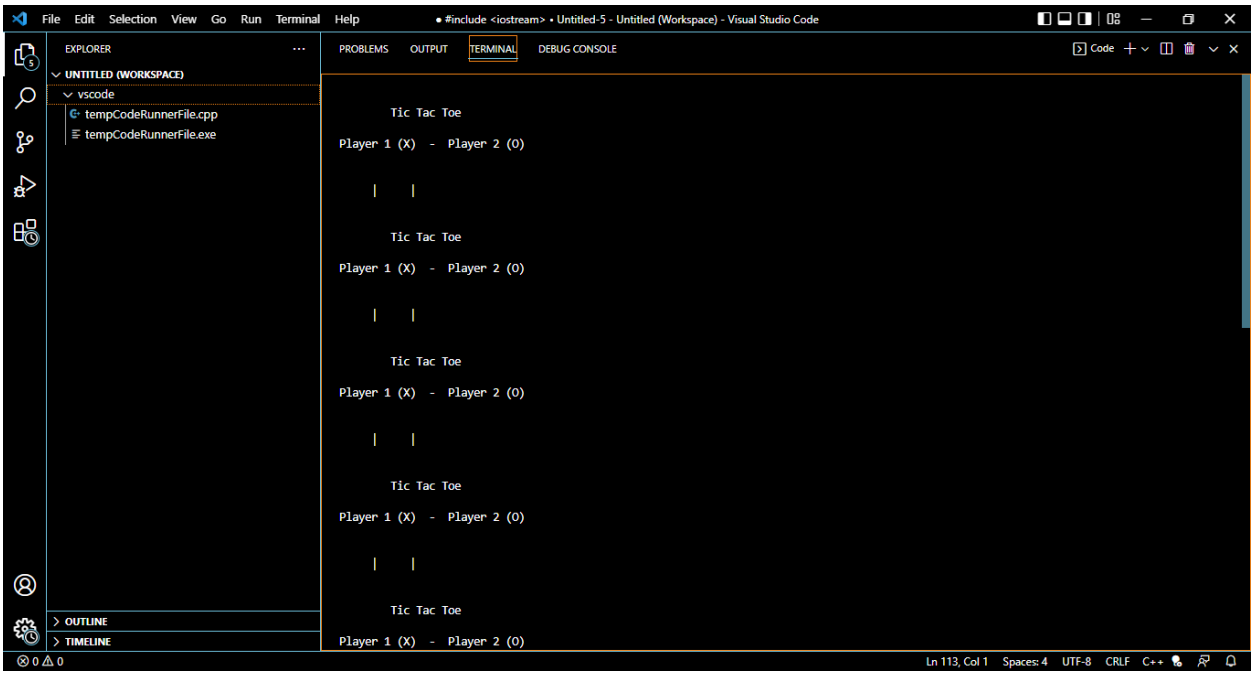
```
#include <iostream>
using namespace std;

char square[10] = {'o','1','2','3','4','5','6','7','8','9'};
int checkwin();
void board();

int main()
{
	int player = 1,i,choice;
	char mark;
	do
	{
		board();
		player=(player%2)?1:2;
		cout << "Player " << player << ", enter a number:  ";
		cin >> choice;
		mark=(player == 1) ? 'X' : 'O';
		if (choice == 1 && square[1] == '1')
			square[1] = mark;
		else if (choice == 2 && square[2] == '2')
			square[2] = mark;
		else if (choice == 3 && square[3] == '3')
			square[3] = mark;
		else if (choice == 4 && square[4] == '4')
			square[4] = mark;
		else if (choice == 5 && square[5] == '5')
			square[5] = mark;
		else if (choice == 6 && square[6] == '6')
			square[6] = mark;
		else if (choice == 7 && square[7] == '7')
			square[7] = mark;
		else if (choice == 8 && square[8] == '8')
			square[8] = mark;
		else if (choice == 9 && square[9] == '9')
			square[9] = mark;
		else
		{
			cout<<"Invalid move ";
			player--;
			cin.ignore();
			cin.get();
		}
		i=checkwin();
		player++;
	}while(i==-1);
```

```
	board();
	if(i==1)
		cout<<"==>\aPlayer "<<--player<<" win ";
	else
		cout<<"==>\aGame draw";
	cin.ignore();
	cin.get();
	return 0;
}
/*********************************************
	FUNCTION TO RETURN GAME STATUS
	1 FOR GAME IS OVER WITH RESULT
	-1 FOR GAME IS IN PROGRESS
	O GAME IS OVER AND NO RESULT
*********************************************/

int checkwin()
{
	if (square[1] == square[2] && square[2] == square[3])
		return 1;
	else if (square[4] == square[5] && square[5] == square[6])
		return 1;
	else if (square[7] == square[8] && square[8] == square[9])
		return 1;
	else if (square[1] == square[4] && square[4] == square[7])
		return 1;
	else if (square[2] == square[5] && square[5] == square[8])
		return 1;
	else if (square[3] == square[6] && square[6] == square[9])
		return 1;
	else if (square[1] == square[5] && square[5] == square[9])
		return 1;
	else if (square[3] == square[5] && square[5] == square[7])
		return 1;
	else if (square[1] != '1' && square[2] != '2' && square[3] != '3' && square[4] != '4' &&
square[5] != '5' && square[6] != '6' && square[7] != '7' && square[8] != '8' && square[9] !=
'9')
		return 0;
	else
		return -1;
}


/*********************************************************************
   FUNCTION TO DRAW BOARD OF TIC TAC TOE WITH PLAYERS MARK
*********************************************************************/
```

```
void board()
{
	system("cls");
	cout << "\n\n\tTic Tac Toe\n\n";
	cout << "Player 1 (X)  -  Player 2 (O)" << endl << endl;
	cout << endl;
	cout << "     |     |     " << endl;
	cout << "  " << square[1] << "  |  " << square[2] << "  |  " << square[3] << endl;
	cout << "_____|_____|_____" << endl;
	cout << "     |     |     " << endl;
	cout << "  " << square[4] << "  |  " << square[5] << "  |  " << square[6] << endl;
	cout << "_____|_____|_____" << endl;
	cout << "     |     |     " << endl;
	cout << "  " << square[7] << "  |  " << square[8] << "  |  " << square[9] << endl;
	cout << "     |     |     " << endl << endl;
}

/*************************************************************************
                              END OF PROJECT
*************************************************************************/
```

Outputs


File Edit Selection View Go Run Terminal Help
• #include <iostream> • Untitled-5 - Untitled (Workspace) - Visual Studio Code
EXPLORER
UNTITLED (WORKSPACE)
vscode
tempCodeRunnerFile.cpp
tempCodeRunnerFile.exe
PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE
Code
Tic Tac Toe
Player 1 (X) - Player 2 (O)
OUTLINE
TIMELINE
Ln 113, Col 1 Spaces: 4 UTF-8 CRLF C++


File Edit Selection View Go Run Terminal Help
• #include <iostream> • Untitled-5 - Untitled (Workspace) - Visual Studio Code
EXPLORER
UNTITLED (WORKSPACE)
vscode
tempCodeRunnerFile.cpp
tempCodeRunnerFile.exe
PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE
Code
Tic Tac Toe
Player 1 (X) - Player 2 (O)
X | 2 | O
X | O | 6
X | 8 | 9
==>Player 1 win
OUTLINE
TIMELINE
Ln 113, Col 1 Spaces: 4 UTF-8 CRLF C++