#include **<iostream>**#include **<string>
using namespace** std;

*//Tic Tac Toe Game!***static void** printBoard(string board[3][3]){
 **for**(**int** i = 0; i< 3; i++){
 **for**(**int** j = 0; j< 3; j++){
 cout << **" | "** + board[j][i] + **" |"**;
 }
 cout << **"\n"**;
 }
}
**static void** playGame(string board[3][3], string choice, **int** box){
 **switch**(box){
 **case** 1: board[0][0] = choice;
 **break**;
 **case** 2: board[1][0] = choice;
 **break**;
 **case** 3: board[2][0] = choice;
 **break**;
 **case** 4: board[0][1] = choice;
 **break**;
 **case** 5: board[1][1] = choice;
 **break**;
 **case** 6: board[2][1] = choice;
 **break**;
 **case** 7: board[0][2] = choice;
 **break**;
 **case** 8: board[1][2] = choice;
 **break**;
 **case** 9: board[2][2] = choice;
 **break**;
 }
}
**static bool** winner(string board[3][3]){
 **if** (board[0][0] == board[0][1] && board[0][1] == board[0][2]) {
 **return true**;
 } **else if** (board[0][0] == board[1][0] && board[1][0] == board[2][0] && board[0][0] != **""**) {
 **return true**;
 } **else if** (board[1][0] == board[1][1] && board[1][1] == board[1][2] && board[1][0] != **""**) {
 **return true**;
 } **else if** (board[0][1] == board[1][1] && board[1][1] == board[2][1] && board[0][1] != **""**) {
 **return true**;
 } **else if** (board[2][0] == board[2][1] && board[2][1] == board[2][2] && board[2][0] != **""**) {
 **return true**;
 } **else if** (board[0][2] == board[1][2] && board[1][2] == board[2][2] && board[0][2] != **""**) {
 **return true**;
 } **else if** (board[0][0] == board[1][1] && board[1][1] == board[2][2] && board[0][0] != **""**) {
 **return true**;
 } **else if** (board[0][2] == board[1][1] && board[1][1] == board[2][0] && board[0][2] != **""**) {
 **return true**;
 }
 **return false**;

}
**int** main() {
 string board[3][3];
 string choice;
 string choice2;
 **int** turn = 0;
 **int** box;
 cout << **"Lets play Tic Tac Toe! \n"** << **"Which letter do you want to use?\n"** << **"Type 'X' for X and 'O' for O:"** << endl;
 cin >> choice;
 **while**(choice != **"X"** && choice != **"O"**){
 cout << **"Your choice was invalid. Please enter X or O"**<< endl;
 cin >> choice;
 }
 **if**(choice == **"X"**) {
 cout << **"Player 2 will be O"** << endl;
 choice2 = **"O"**;
 }**else if**(choice == **"O"**){
 cout << **"Player 2 will be X"** << endl;
 choice2 = **"X"**;
 }

 **while**(turn < 5) {
 cout << **"Player 1. Please state the number of the box you would like to place the "** + choice + **" in."** << endl;
 printBoard(board);
 cin >> box;
 playGame(board, choice, box);
 **if**(winner(board)){
 cout << **"Congrats! We have a winner!"** << endl;
 printBoard(board);
 **return** 0;
 }
 cout << **"Player 2. Please state the number of the box you would like to place the "** + choice2 + **" in."** << endl;
 printBoard(board);
 cin >> box;
 playGame(board, choice2, box);
 **if**(winner(board)){
 cout << **"Congrats! We have a winner!"** << endl;
 printBoard(board);
 **return** 0;
 }
 turn++;

 }
 cout << **"Tie Game!"** << endl;
 **return** 0;
}