#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;  
}