#include <iostream>

using namespace std;

void displayBoard(char board[3][3]) {

cout << "\n";

for (int i = 0; i < 3; i++) {

for (int j = 0; j < 3; j++) {

cout << board[i][j];

if (j < 2) cout << " | ";

}

if (i < 2) cout << "\n---------\n";

}

cout << "\n";

}

char checkWinner(char board[3][3]) {

for (int i = 0; i < 3; i++) {

if (board[i][0] == board[i][1] && board[i][1] == board[i][2]) return board[i][0];

if (board[0][i] == board[1][i] && board[1][i] == board[2][i]) return board[0][i];

}

if (board[0][0] == board[1][1] && board[1][1] == board[2][2]) return board[0][0];

if (board[0][2] == board[1][1] && board[1][1] == board[2][0]) return board[0][2];

return ' ';

}

bool isDraw(char board[3][3]) {

for (int i = 0; i < 3; i++)

for (int j = 0; j < 3; j++)

if (board[i][j] == ' ') return false;

return true;

}

int main() {

char board[3][3] = { {' ', ' ', ' '}, {' ', ' ', ' '}, {' ', ' ', ' '} };

char currentPlayer = 'X';

int row, col;

cout << "Welcome to Tic Tac Toe!\n";

displayBoard(board);

while (true) {

cout << "Player " << currentPlayer << ", enter your move (row and column: 0, 1, or 2): ";

cin >> row >> col;

if (row < 0 || row > 2 || col < 0 || col > 2 || board[row][col] != ' ') {

cout << "Invalid move! Try again.\n";

continue;

}

board[row][col] = currentPlayer;

displayBoard(board);

char winner = checkWinner(board);

if (winner != ' ') {

cout << "Player " << winner << " wins!\n";

break;

}

if (isDraw(board)) {

cout << "It's a draw!\n";

break;

}

currentPlayer = (currentPlayer == 'X') ? 'O' : 'X';

}

return 0;

}