#include <stdio.h>

TIC TAC TOE IN C.

#include <stdbool.h>

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

printf("-------------\n");

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

printf("| ");

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

printf("%c | ", board[i][j]);

}

printf("\n-------------\n");

}

}

bool checkWin(char board[3][3], char player) {

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

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

return true;

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

return true;

}

if (board[0][0] == player && board[1][1] == player && board[2][2] == player)

return true;

if (board[0][2] == player && board[1][1] == player && board[2][0] == player)

return true;

return false;

}

int main() {

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

{' ', ' ', ' '},

{' ', ' ', ' '} };

char player = 'X';

int row, col;

int turn;

printf("Welcome to Tic-Tac-Toe!\n");

for (turn = 0; turn < 9; turn++) {

drawBoard(board);

while (1) {

printf("Player %c, enter row (0-2) and column (0-2): ", player);

scanf("%d %d", &row, &col);

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

printf("Invalid move. Try again.\n");

} else {

break;

}

}

board[row][col] = player;

if (checkWin(board, player)) {

drawBoard(board);

printf("Player %c wins!\n", player);

return 0;

}

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

}

drawBoard(board);

printf("It's a draw!\n");

}