

Tic-tac-toe

```
#include <stdio.h>
#include <conio.h>
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;
        printf("Player %d, enter a number: ", player);
        scanf("%d", &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
        {
            printf("Invalid move ");
            player--;
            getch();
        }
        i = checkwin();
        player++;
    }
```

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}while (i == - 1);
board();
if (i == 1)
printf("==>\aPlayer %d win ", --player);
else
printf("==>\aGame draw");
getch();
return 0;
}
/*****
FUNCTION TO RETURN GAME STATUS
1 FOR GAME IS OVER WITH RESULT
-1 FOR GAME IS IN PROGRESS
0 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");
printf("\n\n\tTic Tac Toe\n\n");
printf("Player 1 (X) - Player 2 (O)\n\n\n");
printf(" | | \n");
printf(" %c | %c | %c \n", square[1], square[2], square[3]);
printf("_____|_____|_____\n");
printf(" | | \n");
printf(" %c | %c | %c \n", square[4], square[5], square[6]);
printf("_____|_____|_____\n");
printf(" | | \n");
printf(" %c | %c | %c \n", square[7], square[8], square[9]);
printf(" | | \n\n");
}
/*****
END OF PROJECT
*****/

```