#include <stdio.h>

#include <stdlib.h>

#include <conio.h>

char square[10] = { 'o', '1', '2', '3', '4', '5', '6', '7', '8', '9' };

int choice, player=1;

char player1[100],player2[100];

int checkForWin();

void displayBoard();

void markBoard(char mark);

int main()

{

int gameStatus;

char mark;

printf("\*\*\*\*\*\*\*\*\*Welcome To My Tik Tak Toe Game\*\*\*\*\*\*\*\*\*\n\n");

printf("enter player1 name\n");

scanf("%s",player1);

printf("enter player2\n");

scanf("%s",player2);

printf("%s vs %s\n\n",player1,player2);

printf("player1 = %s \n",player1);

printf("player2 =%s \n",player2);

do

{

displayBoard();

player = (player % 2) ? 1 : 2;

if(player==1)

{

printf("%s is active\n",player1);

printf(" player %s, enter a number: \n", player1);

scanf("%d", &choice);

}

else

{

printf("%s is active\n",player2);

printf(" %s, enter your number\n",player2);

scanf("%d",&choice);

}

mark = (player == 1) ? 'X' : 'O';

markBoard(mark);

gameStatus = checkForWin();

player++;

}while (gameStatus == -1);

displayBoard();

if (gameStatus == 1)

{

player = (player % 2) ? 1 : 2;

if(player==1)

{

printf("\*\*\*\*\*player2=%s win congratulations\*\*\*\*\*\n",player2);

}

else

{

printf("\*\*\*\*\*\*player1=%s win congratulations\*\*\*\*\*\*\n",player1);

}

}

else

printf("==>\aGame draw");

return 0;

}

void displayBoard()

{

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");

}

int checkForWin()

{

int returnValue = 0;

if (square[1] == square[2] && square[2] == square[3])

{

returnValue = 1;

}

else if (square[4] == square[5] && square[5] == square[6])

returnValue = 1;

else if (square[7] == square[8] && square[8] == square[9])

returnValue = 1;

else if (square[1] == square[4] && square[4] == square[7])

returnValue = 1;

else if (square[2] == square[5] && square[5] == square[8])

returnValue = 1;

else if (square[3] == square[6] && square[6] == square[9])

returnValue = 1;

else if (square[1] == square[5] && square[5] == square[9])

returnValue = 1;

else if (square[3] == square[5] && square[5] == square[7])

returnValue = 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')

returnValue = 0;

else

returnValue = -1;

return returnValue;

}

void markBoard(char mark)

{

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();

}

}