Name - Sakshi Ashok Jagdale

Roll No - 08

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ASSIGNMENT 1

TIC-TAC-TOE : NON - AI

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SOURCE CODE -

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#include <stdio.h>

#include <conio.h>

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

int winner(){

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

return 1;

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

return 1;

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

return 1;

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

return 1;

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

return 1;

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

return 1;

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

return 1;

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

return 1;

else if (box[1] != '1' && box[2] != '2' && box[3] != '3' &&

box[4] != '4' && box[5] != '5' && box[6] != '6' && box[7]

!= '7' && box[8] != '8' && box[9] != '9')

return 0;

else

return - 1;

}

void board(){

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", box[1], box[2], box[3]);

printf("\_\_\_\_\_|\_\_\_\_\_|\_\_\_\_\_\n");

printf(" | | \n");

printf(" %c | %c | %c \n", box[4], box[5], box[6]);

printf("\_\_\_\_\_|\_\_\_\_\_|\_\_\_\_\_\n");

printf(" | | \n");

printf(" %c | %c | %c \n", box[7], box[8], box[9]);

printf(" | | \n\n");

}

int main(){

int player=2;

int i,n;

char mark;

do{

board();

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

printf("Player %d enter your choice(from 1-9):",player);

scanf("%d",&n);

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

if (n == 1 && box[1] == '1')

box[1] = mark;

else if (n == 2 && box[2] == '2')

box[2] = mark;

else if (n == 3 && box[3] == '3')

box[3] = mark;

else if (n == 4 && box[4] == '4')

box[4] = mark;

else if (n == 5 && box[5] == '5')

box[5] = mark;

else if (n == 6 && box[6] == '6')

box[6] = mark;

else if (n == 7 && box[7] == '7')

box[7] = mark;

else if (n == 8 && box[8] == '8')

box[8] = mark;

else if (n == 9 && box[9] == '9')

box[9] = mark;

else

{

printf("Invalid move ");

player--;

getch();

}

i = winner();

}while (i == - 1);

board();

if (i == 1)

printf("==>\aPlayer %d win ", player);

else if(i==0)

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

return 0;

}