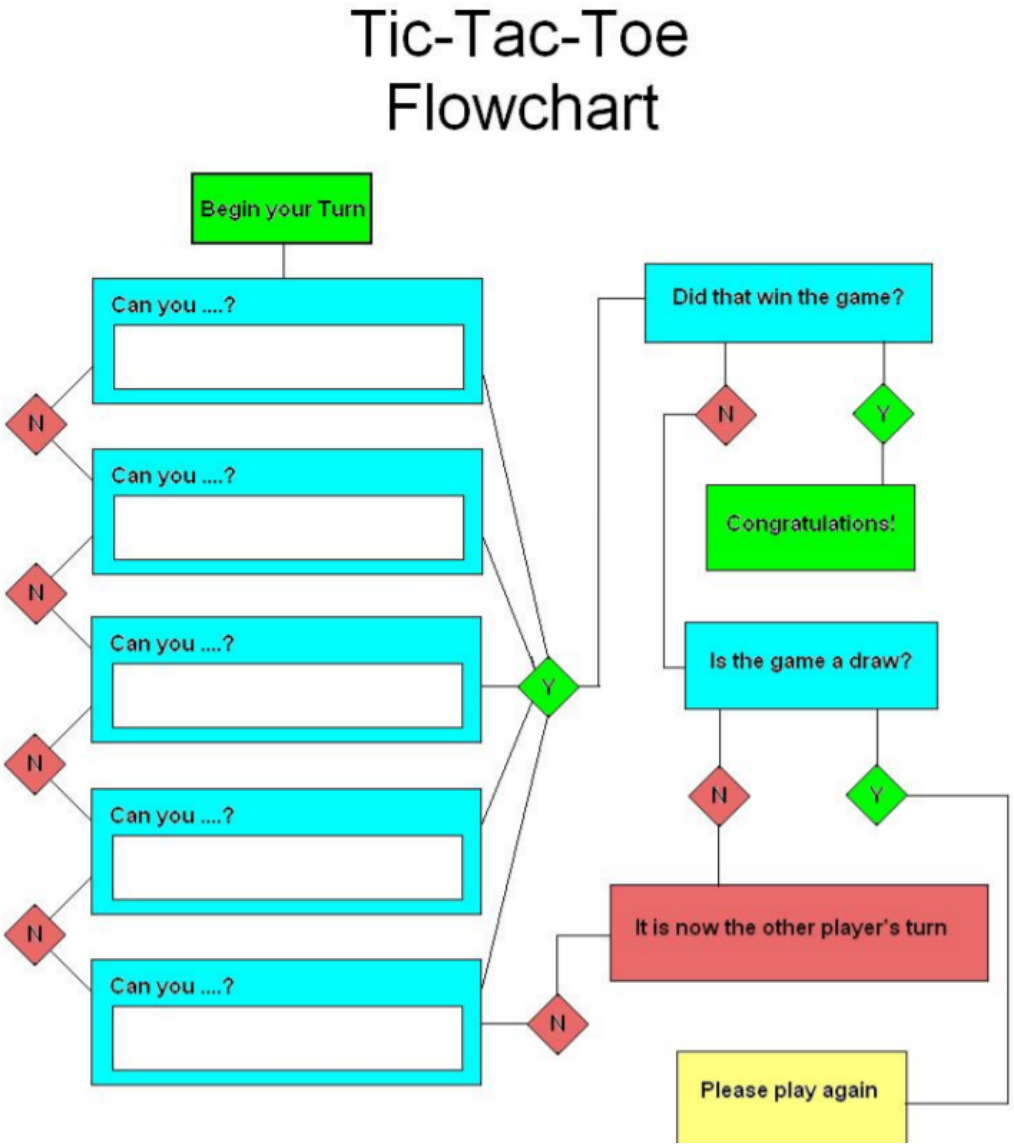
CODE FOR TIC TAC TOE GAME



The code

```
#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++;
}while (i ==  - 1);
```

```
    board();

    if (i == 1)
        printf("==>\aPlayer %d win ", --player);
    else
        printf("==>\aGame draw");

    getch();

    return 0;
}
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;
}
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");
}
```

The result

```
Player 1, enter a number:  7
sh: 1: cls: not found


        Tic Tac Toe

Player 1 (X)  -  Player 2 (O)


     |     |
  X  |  2  |  O
_____|_____|_____
     |     |
  X  |  O  |  6
_____|_____|_____
     |     |
  X  |  8  |  9
     |     |

==>Player 1 win

...Program finished with exit code 0
Press ENTER to exit console.
```

ABSTRACT

We have used stdio.h and conio.h functions in this program. First we have decided the place where we can put our ‘x’ and ‘o’ as per the rules of the game. Next we have fixed the function to return game status. That is +1 for the winner, -1 for the one who loses and 0 if the game is over with no results (tie). Then in next part we have put the codes to draw the board of tic tac toe game using symbols and that’s the end of the project. The usage of this program is very easy and simple. We can use this program to play tic tac toe game with our friends.

DECLARATION

I will like to thank our respected teacher Mr R Raj Kumar for all his support and guidance he provided us. Even through these hard time which we all are going through he never left us alone and always solved our doubts and helped with all enthusiasm. I will also like to thank ‘http://www.ms.uky.edu/’ for the flow chart picture they have provide us with and all my dear friends who were there whenever I needed any help. Thank you all.