

**Source Code:**

```
#include <stdio.h>

#include<conio.h>

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

int checkwin();

void board();

void diceGame()
{
    int dice_target=5;

    int dice_val, i=1;

    printf("----- welcome to Dice Game of two Users-----\n");

    while(1)
    {
        if(i%2==1)
        {
            printf("Enter the dice value of user 1 : ");

            scanf("%d",&dice_val);

            if(dice_val == dice_target)
            {
                printf("\nuser 1 won the Dice Game\n");

                break;
            }
        }

        else
        {
            printf("Enter the dice value of user 2 : ");

            scanf("%d",&dice_val);

            if(dice_val == dice_target)
            {
                printf("\nuser 2 won the Dice Game\n");
```

```
        break;
    }
}
i++;
}
}
```

```
void ticTacToe()
```

```
{
```

```
    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()
{

printf("----- welcome to Tic Tac Toe Game of two Users -----\\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");
```

```
}
```

```
void guessNum()
```

```
{
```

```
int i=1, target=100, num_val;
```

```
printf("----- welcome to number guess Game of two Users-----\n");
```

```
while(1)
```

```
{
```

```
    printf("Enter the num value of user : ");
```

```
    scanf("%d",&num_val);
```

```
    if(num_val == target)
```

```
    {
```

```
        printf("\nYou guessed correctly in the attempt %d\n",i);
```

```
        break;
```

```

    }

    else if(num_val > target)
    {
        printf("\ngussed number is greater than actual number in the attempt %d\n",i);
    }

    else
    {
        printf("\ngussed number is lesser than actual number in the attempt %d\n",i);
    }

    i++;
}
}

int main()
{
    int choice;

    printf("Hi, Welcome to Harish Games \n");

    printf("***** choose options to start the games *****\n");

    printf("1. Dice Game\n");
    printf("2. Tic-Tac-Toe Game\n");
    printf("3. Guess Number Game\n ");
    printf("*****\n");

    scanf("%d",&choice);

    switch(choice)
    {
        case 1 : diceGame();

            break;

        case 2 : ticTacToe();

```

```
break;
```

```
case 3 : guessNum();
```

```
break;
```

```
default : printf(" Not a valid choice \n ");
```

```
}
```

```
return 0;
```

```
}
```