

MINI PROJECT REPORT

```
\documentclass[10pt,a4paper]{article}
```

```
\usepackage{amsmath}
```

```
\usepackage{listings}
```

```
\usepackage{graphicx}
```

```
\usepackage{cleveref}
```

```
\begin{document}
```

```
\begin{center}
```

```
\textbf{\huge Mini Project}
```

```
\section{code in c language}
```

```
\end{center}
```

```
\begin{lstlisting}
```

```
#include<stdio.h>
```

```
#include <conio.h>
```

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

```
int checkwin();
```

```
void board();
```

```
void win(int i,int player);
```

```
int playersel(int player);
```

```
int choicesel(int choice,int player);
```

```
int marksel(int player);
```

```
int main()
{
    int player, i, choice;

    player=playersel(player);

    char mark;

    do
    {
        board();

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

        choice=choicesel(choice,player);


        mark=marksel(player);


        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();
```

```
win(i,player);

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 win(int i,int player){

    if (i == 1)

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

    else

        printf("game over");

}

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");
```

```
}
```

```
int playersel(int player){
```

```
    printf("enter player attempt no.");
```

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

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

```
    return player;
```

```
}
```

```
int choicesel(int choice,int player){
```

```
    printf("Player %d, enter a number: ", player);
```

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

```

        return choice;
    }

    int marksel(int player){
        int mark = (player == 1) ? 'X' : 'O';
        return mark;
    }

```

\end{lstlisting}

\begin{figure}

\centering

\includegraphics[height=12cm,width=13cm]{Screenshot (38).png}

\caption{c code output}

\label{calc code}

\end{figure}

\begin{figure}

\centering

\includegraphics[height=12cm,width=13cm]{Screenshot (39).png}

\caption{ c code output 2}

\label{calc code}

\end{figure}

\begin{figure}

\centering

```
\includegraphics[height=12cm,width=13cm]{Screenshot (40).png}
```

```
\caption{c code output 3}
```

```
\label{calc code}
```

```
\end{figure}
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```
\begin{figure}
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```
\centering
```

```
\includegraphics[height=12cm,width=13cm]{Screenshot (41).png}
```

```
\caption{c code output 4}
```

```
\label{caslc code}
```

```
\end{figure}
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```
\end{document}
```