```
 1  using System;
 2  using System.Collections.Generic;
 3  using System.Linq;
 4  using System.Text;
 5  using System.Threading.Tasks;
 6
 7  namespace TicTacToeGame
 8  {
 9      class Program
10      {
11
12          public static char[,] playField = { { '1', '2', '3' }, //Row0
13                                              { '4', '5', '6' }, //Row1
14                                              { '7', '8', '9' } }; //Row2
15
16          static void Main(string[] args)
17          {
18
19
20
21
22              int player = 2;
23              int input = 0;
24              bool correctInput = true;
25
26              do
27              {
28
29                      if (player == 2)
30                          player = 1;
31                      else if (player == 1)
32                          player = 2;
33                      DrawBoard();
34                  #region
35                  //To check winning condition
36                  char[] playerChar = {'X','O'};
37                  foreach (var item in playerChar)
38                  {
39                      if((playField[0,0] ==item && playField[0,1]==item &&
                        playField[0,2]==item) ||
40                          (playField[1, 0] == item && playField[1, 1] == item &&
                         playField[1, 2] == item) ||
41                          (playField[2, 0] == item && playField[2, 1] == item &&
                         playField[2, 2] == item) ||
42                          (playField[0, 0] == item && playField[1, 0] == item &&
                         playField[2, 0] == item) ||
43                          (playField[0, 1] == item && playField[1, 1] == item &&
                         playField[2, 1] == item) ||
44                          (playField[0, 2] == item && playField[1, 2] == item &&
```

```
                        playField[2, 2] == item) ||
45                          (playField[0, 0] == item && playField[1, 1] == item &&
                        playField[2, 2] == item) ||
46                          (playField[0, 2] == item && playField[1, 1] == item &&
                        playField[2, 0] == item))
47                      {
48
49                          if (item == 'X')
50                              Console.WriteLine("Player1 is the Winner");
51                          else if (item == 'O')
52                              Console.WriteLine("Player2 is the Winner");
53
54                          break;
55                      }
56                  }
57
58                  #endregion
59                  #region
60                  // This region is to check the field is occupied or not
61                  do
62                  {
63                      Console.WriteLine("\nPlayer{0}, Choose the field",player);
64
65                      try
66                      {
67                          input = Convert.ToInt32(Console.ReadLine());
68                      }
69                      catch
70                      {
71                          Console.WriteLine("Enter between 0 and 9");
72                      }
73                      if (input == 1 && playField[0, 0] == '1') // when we use
                        same field
74                      {
75                          correctInput = true;
76                      }
77                      else if (input == 2 && playField[0, 1] == '2')
78                      {
79                          correctInput = true;
80                      }
81                      else if (input == 3 && playField[0, 2] == '3')
82                      {
83                          correctInput = true;
84                      }
85                      else if (input == 4 && playField[1, 0] == '4')
86                      {
87                          correctInput = true;
88                      }
89                      else if (input == 5 && playField[1, 1] == '5')
```

```
90                      {
91                          correctInput = true;
92                      }
93                      else if (input == 6 && playField[1, 2] == '6')
94                      {
95                          correctInput = true;
96                      }
97                      else if (input == 7 && playField[2, 0] == '7')
98                      {
99                          correctInput = true;
100                     }
101                     else if (input == 8 && playField[2, 1] == '8')
102                     {
103                         correctInput = true;
104                     }
105                     else if (input == 9 && playField[2, 2] == '9')
106                     {
107                         correctInput = true;
108                     }
109                     else
110                     {
111                         Console.WriteLine("Please give in another field\n");
112                         correctInput = false;
113                     }
114                 } while (!correctInput);
115                 #endregion
116                 EnterXorO(player, input);
117             } while (true);
118             Console.WriteLine("ThankYou");
119
120             Console.ReadLine();
121         }
122
123         private static void EnterXorO(int player,int input)
124         {
125             char playerSign = ' ';
126             if (player == 1)
127                 playerSign = 'X';
128             else if (player == 2)
129                 playerSign = 'O';
130
131                 switch (input)
132                     {
133                         case 1:
134                             playField[0, 0] = playerSign;
135                             break;
136                         case 2:
137                             playField[0, 1] = playerSign;
138                             break;
```

```
139                         case 3:
140                             playField[0, 2] = playerSign;
141                             break;
142                         case 4:
143                             playField[1, 0] = playerSign;
144                             break;
145                         case 5:
146                             playField[1, 1] = playerSign;
147                             break;
148                         case 6:
149                             playField[1, 2] = playerSign;
150                             break;
151                         case 7:
152                             playField[2, 0] = playerSign;
153                             break;
154                         case 8:
155                             playField[2, 1] = playerSign;
156                             break;
157                         case 9:
158                             playField[2, 2] = playerSign;
159                             break;
160                         default:
161                             break;
162                     }
163         }
164 
165         private static void DrawBoard()
166         {
167             //This is a method to draw 3*3 Board
168             Console.Clear();
169             Console.WriteLine("   |   |   ");
170             Console.WriteLine(" {0} | {1} | {2} ",playField[0,0],playField
                  [0,1],playField[0,2]);
171             Console.WriteLine("___|___|___");
172             Console.WriteLine("   |   |   ");
173             Console.WriteLine(" {0} | {1} | {2} ", playField[1, 0], playField
                  [1, 1], playField[1, 2]);
174             Console.WriteLine("___|___|___");
175             Console.WriteLine("   |   |   ");
176             Console.WriteLine(" {0} | {1} | {2} ", playField[2, 0], playField
                  [2, 1], playField[2, 2]);
177             Console.WriteLine("   |   |   ");
178 
179         }
180     }
181 }
182 
```