

```

1  class tictactoe:
2      def __init__(self):
3          self.d = []
4          for i in range(1,11):
5              self.d.append(0)
6      def addx(self,n):
7          if self.d[n]==0:
8              self.d[n]="X"
9          else:
10             print("already place is occupied")
11      def addo(self,n):
12          if self.d[n]==0:
13              self.d[n]="O"
14          else:
15             print("already place is occupied")
16      def show(self):
17          for i in range(1,10):
18              if i%3!=0:
19                  print(self.d[i],end="| ")
20              else:
21                  print(self.d[i],end="| ")
22                  print()
23      def checkgamex(self):
24          if self.d[1]==self.d[2]==self.d[3]=="X":
25              return self.d[1]
26          elif self.d[4]==self.d[5]==self.d[6]=="X":
27              return self.d[4]
28          elif self.d[7]==self.d[8]==self.d[9]=="X":
29              return self.d[7]
30          elif self.d[1]==self.d[4]==self.d[7]=="X":
31              return self.d[1]
32          elif self.d[2]==self.d[5]==self.d[8]=="X":
33              return self.d[2]
34          elif self.d[3]==self.d[6]==self.d[9]=="X":
35              return self.d[3]
36          elif self.d[1]==self.d[5]==self.d[9]=="X":
37              return self.d[1]
38          elif self.d[3]==self.d[5]==self.d[7]=="X":
39              return self.d[3]
40          else:
41              return None
42      def checkgameo(self):
43          if self.d[1]==self.d[2]==self.d[3]=="O":
44              return self.d[1]
45          elif self.d[4]==self.d[5]==self.d[6]=="O":
46              return self.d[4]
47          elif self.d[7]==self.d[8]==self.d[9]=="O":
48              return self.d[7]
49          elif self.d[1]==self.d[4]==self.d[7]=="O":
50              return self.d[1]
51          elif self.d[2]==self.d[5]==self.d[8]=="O":
52              return self.d[2]
53          elif self.d[3]==self.d[6]==self.d[9]=="O":
54              return self.d[3]
55          elif self.d[1]==self.d[5]==self.d[9]=="O":
56              return self.d[1]
57          elif self.d[3]==self.d[5]==self.d[7]=="O":
58              return self.d[3]
59          else:
60              return None
61      def checkdraw(self):
62          flag = 0
63          for i in range(1,10):
64              if self.d[i]==0:
65                  flag = 1
66          if flag ==1 :
67              return 1
68          else:
69              return 0
70  ob = tictactoe()
71  while True:
72      print()
73      print("Enter position for player X : ")
74      n = int(input())
75      ob.addx(n)
76      ob.show()

```

```

77     game = ob.checkgamex()
78     if game!=None:
79         print(game,"wins the game")
80         break
81
82     draw = ob.checkdraw()
83     if draw==0:
84         print("Game draw")
85         break
86     print()
87     print("Enter position for player 0 : ")
88     n= int(input())
89     ob.addo(n)
90     ob.show()
91     game = ob.checkgameo()
92     if game!=None:
93         print(game,"wins the game")
94         break
95
96     draw = ob.checkdraw()
97     if draw==0:
98         print("Game draw")
99         break
100
101

```



Enter position for player X :

```

1
X|0|0|
0|0|0|
0|0|0|

```

Enter position for player 0 :

```

5
X|0|0|
0|0|0|
0|0|0|

```

Enter position for player X :

```

2
X|X|0|
0|0|0|
0|0|0|

```

Enter position for player 0 :

```

3
X|X|0|
0|0|0|
0|0|0|

```

Enter position for player X :

```

7
X|X|0|
0|0|0|
X|0|0|

```

Enter position for player 0 :

```

6
X|X|0|
0|0|0|
X|0|0|

```

Enter position for player X :

```

4
X|X|0|
X|0|0|
X|0|0|
X wins the game

```

✓ 55s completed at 1:56 PM

● ×