

Tic-Tac-Toe Game In Python

```
In [5]: board = [' ',' ',' ',' ',' ',' ',' ',' ',' ',' ']
player = 1

#win Flags
win = 1
draw = -1
running = 0

#while condit

game = running

#This Function Draws Game Board
def drawboard():
    print(" %c | %c | %c " % (board[1],board[2],board[3]))
    print("_ _|_ _|_ ")
    print(" %c | %c | %c " % (board[4],board[5],board[6]))
    print("_ _|_ _|_ ")
    print(" %c | %c | %c " % (board[7],board[8],board[9]))
    print("   |   |   ")

#This Function Checks position is empty or not
def checkposition(x):
    if board[x] == ' ':
        return True
    else:
        return False

#This Function Checks player has won or not
def checkwin():
    global game

    #Horizontal winning condition
    if (board[1] == board[2] and board[2] == board[3] and board[1] != ' '):
        game = win
    elif (board[4] == board[5] and board[5] == board[6] and board[4] != ' '):
        game = win
    elif (board[7] == board[8] and board[8] == board[9] and board[7] != ' '):
        game = win

    #Vertical Winning Condition
    elif (board[1] == board[4] and board[4] == board[7] and board[1] != ' '):
        game = win
    elif (board[2] == board[5] and board[5] == board[8] and board[2] != ' '):
        game = win
    elif (board[3] == board[6] and board[6] == board[9] and board[3] != ' '):
        game = win

    #Diagonal Winning Condition
    elif (board[1] == board[5] and board[5] == board[9] and board[5] != ' '):
        game = win
    elif (board[3] == board[5] and board[5] == board[7] and board[5] != ' '):
        game = win

    #Match Tie or Draw Condition
    elif (board[1] != ' ' and board[2] != ' ' and board[3] != ' ' and board[4]
```

```

        and board[5] != ' ' and board[6] != ' ' and board[7] != ' ' and board[8]
        and board[9] != ' '):
    game = draw
else:
    game = running

print("Player 1 [X] and Player 2 [O]")

while game == running:
    drawboard()

    if player % 2 != 0:
        print("Player 1's chance")
        mark = 'X'
    else:
        print("Player 2's chance")
        mark = 'O'
    choice = int(input("Enter the position between [1-9] where you want to mark :
    if (checkposition(choice)):
        board[choice] = mark
        player += 1
        checkwin()

drawboard()
if game == draw:
    print("Game Draw")
elif game == win:
    player -= 1
    if player % 2 != 0:
        print("Player 1 won")
    else:
        print("Player 2 won")

```

Player 1 [X] and Player 2 [O]

Player 1's chance

Enter the position between [1-9] where you want to mark : 5

	X	

Player 2's chance

Enter the position between [1-9] where you want to mark : 6

	X	O

Player 1's chance

Enter the position between [1-9] where you want to mark : 4

X	X	O

Player 2's chance

Enter the position between [1-9] where you want to mark : 3

		O
X	X	O

Player 1's chance

Enter the position between [1-9] where you want to mark : 1

X		O
X	X	O

Player 2's chance

Enter the position between [1-9] where you want to mark : 7

X		O
X	X	O
O		

Player 1's chance

Enter the position between [1-9] where you want to mark : 8

X		O
X	X	O
O	X	

Player 2's chance

Enter the position between [1-9] where you want to mark : 2

X	O	O
X	X	O
O	X	

Player 1's chance

Enter the position between [1-9] where you want to mark : 3

X	O	O
X	X	O
O	X	

Player 1's chance

Enter the position between [1-9] where you want to mark : 3

X	O	O
---	---	---

X	X	O
O	X	

Player 1's chance

Enter the position between [1-9] where you want to mark : 9

X	O	O
X	X	O
O	X	X

Player 1 won

In []: