## 9. Implement Tic-Tac-Toe game using Python

```
import os
import time
board = [' ', ' ', ' ',
player = 1
# Win Flags
Win = 1
Draw = -1
Running = 0
Stop = 1
Game = Running
Mark = 'X'
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(" | ")
```

```
def CheckPosition(x):
   if board[x] == ' ':
      return True
   else:
      return False
```

```
def CheckWin():
    global Game
    if board[1] == board[2] and board[2] == board[3] and board[1] != ' ':
    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
    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
    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
    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] --- Player 2 [0]\n")
print()
print()
print("Please Wait...")
time.sleep(3)
while Game == Running:
   os.system('cls')
   DrawBoard()
   if player % 2 != 0:
       print("Player 1's chance")
       Mark = 'X'
   else:
       print("Player 2's chance")
       Mark = '0'
   choice = int(input("Enter the position between [1-9] where you want to mark: "))
   if CheckPosition(choice):
       board[choice] = Mark
       player += 1
       CheckWin()
   os.system('cls')
   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")
```

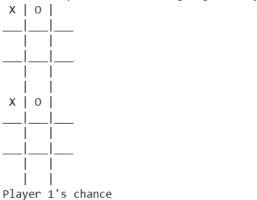
## OUTPUT

Player 1 [X] --- Player 2 [0]

Please Wait... Player 1's chance Enter the position between [1-9] where you want to mark: 1 X | Χ |

Player 2's chance

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



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

X	0	 
X	 	
X	0	 
X		 

Player 2's chance

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

•	0	
Χ		
X	0	
X	0	 

Player 1's chance

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

X	0	 
Х	0	 
Х		

Player 1 Won