FinshedWorkingVersion

February 18, 2018

1 Tic Tac Toe

```
In [ ]: board = [[" "," "," "],[" "," "," "],[" "," "," "]]
        def drawBoard(board):
            for i in range(3):
                print(" |  ".join (str(x) for x in board[i]))
                if i<2:
                    print("----------")


        drawBoard(board)
```

2 My Code

3 Finished Working Version 3

```
In [ ]: def drawboard(board):
            print ("\n")
            for i in range(3):
                print ("  |  ".join(str(x) for x in board[i]))
                if i<2:
                    print("-------------")


        def Winner(board):

            for i in range(3):
                horizontal = set(board[i])
                if len(horizontal)==1 and board[i][2]!=0:
                    return board[i][2]

            for j in range(3):
                vertical = set([board[0][j], board[1][j], board[2][j]])
                if len(vertical)==1 and board[1][j]!=0:
                    return vertical[1][j]
```

```python
        diag1 = set([board[0][0], board[1][1], board[2][2]])
        diag2 = set([board[0][2], board[1][1], board[2][0]])
        if len(diag1)==1 or len(diag2)==1 and board[1][1]!=0:
            return board[1][1]


    return "No One"



if __name__=="__main__":

    Continue='yes'
    count_x=0
    count_o=0

    while Continue!='no':
        board=[[" "," "," "], [" "," "," "], [" "," "," "]]

        drawboard(board)

        count = 0
        chance = True

        while chance:
            spot = input("Enter the row,column in same format as given: ")

            spot = spot.split(",") #gives strings

            horizontal = int(spot[0]) -1
            vertical = int(spot[1]) -1


            if count%2==0:
                print ("\nPlayer 1 chance!")
                if board[horizontal][vertical]==" ":
                    board[horizontal][vertical] = 'X'
                else:
                    print ("Already Filled. Try Again!")
                    count-=1
                drawboard(board)


            else:
                print ("\nPlayer 2 chance!")
                if board[horizontal][vertical]==" ":
                    board[horizontal][vertical]='O'
                else:
                    print ("Already Filled. Try Again!")
                    count-=1
```

```python
            drawboard(board)

        count+=1


        if " " in board[0] or " " in board[1] or " " in board[2]:
            chance = True
        else:
            chance = False
            print ("Chances Over!")


        if Winner(board)=='X':
            print ("Winner is ",Winner(board))
            count_x+=1
            break
        elif Winner(board)=='O':
            print ("Winner is ",Winner(board))
            count_o+=1
            break
        else:
            print ("No winner yet! Carry on.")



    Continue=input("Do you want to play again (y/n): ")

print ("Thank you for playing!")
print ("Score is... \nPlayer 1: %s \nPlayer 2: %s"%(count_x, count_o))
```