#Anthony Leos

#Python Tic Tac Toe Game

#9/15/24

def initialize\_game():

    global winner

    global turn

    global numbers

    global row1

    global row2

    global row3

    winner = 0

    turn = 0

    numbers = [' ','1','2','3']

    row1 = ['a', '-', '-','-']

    row2 = ['b', '-', '-','-']

    row3 = ['c', '-', '-','-']

    board = [numbers, row1, row2, row3]

    for x in board:

        print(x)

def which\_player():

    global marker

    if turn % 2 == 0:

        marker = 'x'

    else:

        marker = 'o'

def get\_choice():

    global coord

    coord = input('Where would you like to place your marker? Enter as coordinates (ex. a1.)')

def place\_marker():

    row = coord[0]

    column = coord[1]

    if row == 'a':

        if column == '1':

            row1[1] = marker

        if column == '2':

            row1[2] = marker

        if column == '3':

            row1[3] = marker

    if row == 'b':

        if column == '1':

            row2[1] = marker

        if column == '2':

            row2[2] = marker

        if column == '3':

            row2[3] = marker

    if row == 'c':

        if column == '1':

            row3[1] = marker

        if column == '2':

            row3[2] = marker

        if column == '3':

            row3[3] = marker

def new\_board():

    board = [numbers, row1, row2, row3]

    for x in board:

        print(x)

def check\_winner():

    global winner

    if (row1[1] == row1[2] == row1[3] != '-') or (row2[1] == row2[2] == row2[3] != '-' ) or (row3[1] == row3[2] == row3[3] != '-') or (row1[1] == row2[1] == row3[1] != '-') or (row1[2] == row2[2] == row3[2] != '-') or (row1[3] == row2[3] == row3[3] != '-') or (row1[1] == row2[2] == row3[3] != '-') or (row1[3] == row2[2] == row3[1] != '-'):

        print("!!!!!!!!!!!!!!!!!!!!!WINNER!!!!!!!!!!!!!!!!!!!!!!!!!!")

        winner = 1

        return winner

def execute\_turn():

    global turn

    which\_player()

    get\_choice()

    place\_marker()

    turn = turn + 1

    new\_board()

    check\_winner()

    """ """

def run\_game():

    #global winner

    initialize\_game()

    x = 0

    while x == 0:

        execute\_turn()

        if winner == 1:

            x = 1

run\_game()