PROGRAM

import random

class TicTacToe:

def \_init\_(self):

self.board = []

def create\_board(self):

for i in range(3):

row = []

for j in range(3):

row.append('-')

self.board.append(row)

def get\_random\_first\_player(self):

return random.randint(0, 1)

def fix\_spot(self, row, col, player):

self.board[row][col] = player

def is\_player\_win(self, player):

win = None

n = len(self.board)

for i in range(n):

win = True

for j in range(n):

if self.board[i][j] != player:

win = False

break

if win:

return win

for i in range(n):

win = True

for j in range(n):

if self.board[j][i] != player:

win = False

break

if win:

return win

win = True

for i in range(n):

if self.board[i][i] != player:

win = False

break

if win:

return win

win = True

for i in range(n):

if self.board[i][n - 1 - i] != player:

win = False

break

if win:

return win

return False

for row in self.board:

for item in row:

if item == '-':

return False

return True

def is\_board\_filled(self):

for row in self.board:

for item in row:

if item == '-':

return False

return True

def swap\_player\_turn(self, player):

return 'X' if player == 'O' else 'O'

def show\_board(self):

for row in self.board:

for item in row:

print(item, end=" ")

print()

def start(self):

self.create\_board()

player = 'X' if self.get\_random\_first\_player() == 1 else 'O'

while True:

print(f"Player {player} turn")

self.show\_board()

row, col = list(

map(int, input("Enter row and column numbers to fix spot: ").split()))

print()

self.fix\_spot(row - 1, col - 1, player)

if self.is\_player\_win(player):

print(f"Player {player} wins the game!")

break

if self.is\_board\_filled():

print("Match Draw!")

break

player = self.swap\_player\_turn(player)

print()

self.show\_board()

tic\_tac\_toe = TicTacToe()

tic\_tac\_toe.start()

OUTPUT

