12.PROGRAM

mport os

import time

board = [' ',' ',' ',' ',' ',' ',' ',' ',' ',' ']

player = 1

########win Flags##########

Win = 1

Draw = -1

Running = 0

Stop = 1

###########################

Game = Running

Mark = 'X'

#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("Tic-Tac-Toe Game Designed By Sourabh Somani")

print("Player 1 [X] --- Player 2 [O]\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 = 'O'

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")

