```
board = ["-", "-", "-",
        "-","-","-",
        "-","-","-",]
game_going = True
winner = None
current player = "X"
def display_board():
    print(board[0] + " | " + board[1] + " | " + board[2])
    print(board[3] + " | " + board[4] + " | " + board[5])
    print(board[6] + " | " + board[7] + " | " + board[8])
def play game():
    # initial board
    display board()
    while game going:
        #single turn
        handle turn(current player)
        #check if game has ended
        check_if_game_over()
        #flip to other player
        flip player()
    # game ended
    if winner == "X" or winner == "O":
        print(winner + "Won.")
    elif winner == None:
       print("Tie.")
#handle single turn of player
def handle turn(player):
    print(player + "'s turn.")
    position = input("Choose Position 1 to 9 : ")
    valid = False
    while not valid:
        while position not in ["1","2","3","4","5","6","7","8","9"]:
            position = input("Choose Position 1 to 9 : ")
        position = int(position) - 1
        if board[position] == "-":
            valid = True
        else:
            print("You cant go there . Go Again.")
    board[position] = player
    display board()
def check if game over():
```

```
check_for_winnner()
    check_for_tie()
def check_for_winnner():
   global winner
    #check rows
    row winner = check rows()
    #check columns
    column winner = check columns()
    #check diagonals
    diagonal_winner = check_diagonals()
    if row winner:
        #there was a win
        winner = row winner
    elif column winner:
        #there was a win
        winner = column winner
    elif diagonal winner:
        #there was a win
        winner = diagonal_winner
    else:
        #there was no win
        winner = None
    return
def check rows():
    global game_going
    row1 = board[0] == board[1] == board[2] != "-"
    row2 = board[3] == board[4] == board[5] != "-"
    row3 = board[6] == board[7] == board[8] != "-"
    if row1 or row2 or row3:
        game going = False
    if row1:
       return board[0]
    elif row2:
       return board[3]
    elif row3:
       return board[6]
    return
def check columns():
    global game going
    column1 = board[0] == board[3] == board[6] != "-"
    column2 = board[1] == board[4] == board[7] != "-"
    column3 = board[2] == board[5] == board[8] != "-"
    if column1 or column2 or column3:
        game going = False
    if column1:
       return board[0]
    elif column2:
       return board[1]
    elif column3:
```

```
return board[2]
    return
def check_diagonals():
    global game going
    diagonal1 = board[0] == board[4] == board[8] != "-"
    diagonal2 = board[6] == board[4] == board[2] != "-"
    if diagonal1 or diagonal2:
        game_going = False
    if diagonal1:
       return board[0]
    elif diagonal2:
        return board[6]
    return
def check_for_tie():
    global game_going
    if "-" not in board:
        game going = False
        return True
    else:
        return False
    return
def flip player():
    global current player
    if current_player == "X":
       current_player = "0"
    elif current_player == "O":
       current player= "X"
    return
play game()
```