**import** **random**

**def** display(board):

print(f'''

**{**board[7]**}**|**{**board[8]**}**|**{**board[9]**}** 7 | 8 | 9

---+---+--- ---+---+---

**{**board[4]**}**|**{**board[5]**}**|**{**board[6]**}** Positions-> 4 | 5 | 6

---+---+--- ---+---+---

**{**board[1]**}**|**{**board[2]**}**|**{**board[3]**}** 1 | 2 | 3

''')

**def** valid\_input():

**while** **True**:

pos = input("Enter Position: ")

**if** pos != ' ':

**if** int(pos) **in** range(1,10):

pos = int(pos)

**break**

print('Not valid position**\n**')

**else**:

print("Thank You for Playing Tic-Tac\_Toe!")

exit()

**return** int(pos)

**def** valid\_pos(turn,board):

print(f'**{**turn**}** chance')

pos = valid\_input()

**while** **True**:

**if** board[pos] == ' ':

board[pos] = turn

**break**

**else**:

print('Cannot Overwrite,Plz Select new loc')

**def** check(board):

check = 0

*# row*

**if** board[1] == board[2] == board[3] != ' ' **or** board[4] == board[5] == board[6] != ' ' **or** board[7] == board[8] == board[9] != ' ':

check = 1

*# col*

**elif** board[1] == board[4] == board[7] != ' ' **or** board[2] == board[5] == board[8] != ' ' **or** board[3] == board[6] == board[9] != ' ':

check = 1

*#diag*

**elif** board[1] == board[5] == board[9] != ' ' **or** board[3] == board[5] == board[7] != ' ':

check = 1

**return** check

**def** userInput(board, symbol):

sym1, sym2 = symbol[random.randint(0,1)]

print('**{sym1}** is going first**\n\n**')

display(board)

**for** i **in** range(9):

**if** i%2==0:

turn = ' '+sym1+' '

valid\_pos(turn,board)

**else**:

turn = ' '+sym2+' '

valid\_pos(turn, board)

display(board)

**if** i>=4:

**if** check(board):

display(board)

print(f" '**{**turn**}**' WON")

**break**

**if** i == 8:

print("None WON, It's a TIE")

**def** game():

board = ["Just to adjust loc :)", ' ' , ' ' , ' ' , ' ' , ' ' , ' ' , ' ' , ' ' , ' ']

symbol = [('X', 'O'), ('O', 'X')]

**while** **True**:

marker = input("**\n**Enter your Marker: ").upper()

**if** marker == 'X' **or** marker == 'O':

userInput(board, symbol)

**break**

**else**:

print('Wrong Marker(X, O) please enter again.**\n**')

**def** main():

again = 'Y'

**while** again == 'Y':

print('Press [space] for input whenever you want to stop the game')

game()

again = input("Press 'y/Y' to play again? : ").upper()

main()

Press [space] for input whenever you want to stop the game

Enter your Marker: x

{sym1} is going first

| | 7 | 8 | 9

---+---+--- ---+---+---

| | Positions-> 4 | 5 | 6

---+---+--- ---+---+---

| | 1 | 2 | 3

O chance

Enter Position: 7

O | | 7 | 8 | 9

---+---+--- ---+---+---

| | Positions-> 4 | 5 | 6

---+---+--- ---+---+---

| | 1 | 2 | 3

X chance

Enter Position: 8

O | X | 7 | 8 | 9

---+---+--- ---+---+---

| | Positions-> 4 | 5 | 6

---+---+--- ---+---+---

| | 1 | 2 | 3

O chance

Enter Position: 5

O | X | 7 | 8 | 9

---+---+--- ---+---+---

| O | Positions-> 4 | 5 | 6

---+---+--- ---+---+---

| | 1 | 2 | 3

X chance

Enter Position: 6

O | X | 7 | 8 | 9

---+---+--- ---+---+---

| O | X Positions-> 4 | 5 | 6

---+---+--- ---+---+---

| | 1 | 2 | 3

O chance

Enter Position: 1

O | X | 7 | 8 | 9

---+---+--- ---+---+---

| O | X Positions-> 4 | 5 | 6

---+---+--- ---+---+---

O | | 1 | 2 | 3

X chance

Enter Position: 9

O | X | X 7 | 8 | 9

---+---+--- ---+---+---

| O | X Positions-> 4 | 5 | 6

---+---+--- ---+---+---

O | | 1 | 2 | 3

O chance

Enter Position: 4

O | X | X 7 | 8 | 9

---+---+--- ---+---+---

O | O | X Positions-> 4 | 5 | 6

---+---+--- ---+---+---

O | | 1 | 2 | 3

O | X | X 7 | 8 | 9

---+---+--- ---+---+---

O | O | X Positions-> 4 | 5 | 6

---+---+--- ---+---+---

O | | 1 | 2 | 3