

```
def printBoard():
    print()
    print("      "+board[6]+" | "+board[7]+" | "+board[8]+" ")
    print("      -----")
    print("      "+board[3]+" | "+board[4]+" | "+board[5]+" ")
    print("      -----")
    print("      "+board[0]+" | "+board[1]+" | "+board[2]+" ")
    print()

def checkInput():
    while True:
        inp = input("Enter Your Symbol : ")
        if(inp == "X"):
            print("Correct! Your symbol is X")
            return "X"
        elif(inp == "O"):
            print("Correct! Your symbol is O")
            return "O"
        else:
            print("Wrong input! Enter Again")

def assignBoard(marker, pos, args):
    args[pos-1] = marker

def checkWon(marker, args):
    pos = 0
    while pos<9:
        if args[pos] == marker:
            if(pos == 0 or pos == 1 or pos == 2):
                if(args[pos+3] == marker and args[pos+6] == marker):
                    print(" "+marker+" Won")
                    return True
            if(pos == 0 or pos == 3 or pos == 6):
                if(args[pos+1] == marker and args[pos+2] == marker):
                    print(" "+marker+" Won")
                    return True
            if(pos == 0):
                if(args[pos+4] == marker and args[pos+8]==marker):
                    print(" "+marker+" Won")
                    return True
            if(pos == 2):
                if(args[pos+2] == marker and args[pos+4] == marker):
                    print(" "+marker+" Won")
                    return True
        pos+=1
    else:
        pos+=1
    return False
```

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import random
def firstPlayer(marker1,marker2):
    check = random.randint(1,2)
    if(check == 1):
        return marker1
    elif(check == 2):
        return marker2

def spaceAvailable(pos,args):
    if args[pos] == " ":
        return True
    else:
        return False

def fullBoard(args):
    for item in range(0,9):
        if spaceAvailable(item,args) == True:
            return False
    return True

def freePos(args):
    pos = int(input("Enter next position(1-9) : "))
    while True:
        if spaceAvailable(pos-1,args) == True:
            return pos
        else:
            pos = int(input("Space already filled! Enter again : "))

def playAgain():
    again = input("Do you want to play again? (yes/no)")
    if again == "yes":
        return True
    else:
        return False

mainstatus = True

while mainstatus == True:
    board = list()
    for item in range(9):
        board.append(' ')
    printBoard()
    print("Player 1 : ")
    marker1 = checkInput()
    if(marker1 == "X"):
        marker2 = "O"
    else:
        marker2 = "X"
    print("\nPlayer 2! Your symbol is "+marker2)
    mark = firstPlayer(marker1,marker2)
    mark1 = mark
    if mark1 == marker1:

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    mark2 = marker2
else:
    mark2 = marker1
print(mark1 + " will start first!")

status = 0
while True:
    print("\n"+mark+" - Your Turn")
    pos = freePos(board)
    assignBoard(mark,pos,board)
    printBoard()
    check = checkWon(mark,board)
    if check == True:
        break
    check1 = fullBoard(board)
    if check1 == True:
        print("Game Tie")
        break
    if status == 0:
        status = 1
        mark = mark2
    else:
        status = 0
        mark = mark1
mainstatus = playAgain()
```



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Player 1 :
 Enter Your Symbol : X
 Correct! Your symbol is X

Player 2! Your symbol is O
 X will start first!

X - Your Turn
 Enter next position(1-9) : 1

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  |  |
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  |  |
  ---
X |  |

```

O - Your Turn
 Enter next position(1-9) : 8

```

  | O |
  ---
  |  |
  ---
X |  |

```

X - Your Turn
 Enter next position(1-9) : 2

```

  | O |
  ---
  |  |
  ---
X | X |

```

O - Your Turn
 Enter next position(1-9) : 3

```

  | O |
  ---
  |  |
  ---
X | X | O

```

X - Your Turn
 Enter next position(1-9) : 4

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  |  |
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```

		0		

x				

x		x		0

0 - Your Turn
Enter next position(1-9) : 7

	0		0	

x				

x		x		0

X - Your Turn
Enter next position(1-9) : 9

	0		0		x

x					

x		x			0

0 - Your Turn
Enter next position(1-9) : 5

	0		0		x

x		0			

x		x			0

0 Won
Do you want to play again? (yes/no)yes

Player 1 :
Enter Your Symbol : 0
Correct! Your symbol is 0

Player 2! Your symbol is X
0 will start first!

0 - Your Turn
Enter next position(1-9) : 5

		0	