# TIC TAC TOE GAME CODE- PYTHON-

board = ['-', '-', '-',  
 '-', '-', '-',  
 '-', '-', '-']  
currentPlayer = "X"  
winner = None  
gameRunning = True  
  
#printing board  
  
def printBoard(board):  
 print(board[0] + " | " + board[1] + " | " + board[2])  
 print("-" \* 9)  
 print(board[3] + " | " + board[4] + " | " + board[5])  
 print("-" \* 9)  
 print(board[6] + " | " + board[7] + " | " + board[8])  
  
#take player input  
def playerInput(board):  
 while True:  
 if currentPlayer == "X":  
 inp = int(input(f"Enter a number 1-9 \033[1;34m Player (X) \033[0;0m : "))  
 else:  
 inp = int(input(f"Enter a number 1-9 \033[1;31m Player (0) \033[0;0m : "))  
 if inp >= 1 and inp <= 9 and board[inp-1] == "-":  
 board[inp-1] = currentPlayer  
 break  
 else:  
 if currentPlayer == "X":  
 print(f"Oops! Try again! Player - \033[1;34m Player (X) \033[0;0m ! ")  
 else:  
 print(f"Oops! Try again! Player - \033[1;31m Player (0) \033[0;0m ! ")  
 printBoard(board)  
  
  
#check for win or tie  
def checkHorizontal(board):  
 global winner  
 if (board[0] == board[1] == board[2] and board[0] != "-") or (board[3] == board[4] == board[5] and board[3] != "-") or (board[6] == board[7] == board[8] and board[6] != "-"):  
 winner = currentPlayer  
 return True  
def checkRow(board):  
 global winner  
 if (board[0] == board[3] == board[6] and board[0] != "-") or (board[1] == board[4] == board[7] and board[1] != "-") or (board[2] == board[5] == board[8] and board[2] != "-"):  
 winner = currentPlayer  
 return True  
def checkDiagonal(board):  
 global winner  
 if (board[0] == board[4] == board[5] and board[0] != "-") or (board[2] == board[4] == board[6] and board[2] != "-"):  
 winner = currentPlayer  
 return True  
def checkTie(board):  
 global gameRunning  
 if "-" not in board:  
 printBoard(board)  
 print("Its a tie")  
 gameRunning = False  
  
def checkWin():  
 if checkDiagonal(board) or checkHorizontal(board) or checkRow(board):  
 print(f"The winner is {winner}")  
  
#switch the player  
def switchPlayer():  
 global currentPlayer  
 if currentPlayer == "X":  
 currentPlayer = "O"  
 else:  
 currentPlayer = "X"  
  
  
  
#check for win or tie again  
  
while gameRunning:  
 printBoard(board)  
 if winner != None:  
 break  
 playerInput(board)  
 checkWin()  
 checkTie(board)  
 switchPlayer()