In [28]:

```
# Define the board as a list of empty squares
board = [" " for i in range(9)]
# Define a function to print the board
def print board():
    print ("-----
    print(" | " + board[0] + " | " + board[1] + " | " + board[2] + " |")
    print("| " + board[3] + " | " + board[4] + " | " + board[5] + " |")
    print(" | " + board[6] + " | " + board[7] + " | " + board[8] + " |")
# Define a function to check if someone has won
def check_win(player):
    # Check rows
    for i in range (0, 9, 3):
        if board[i] == board[i+1] == board[i+2] == player:
            return True
    # Check columns
    for i in range (3):
        if board[i] == board[i+3] == board[i+6] == player:
            return True
    # Check diagonals
    if board[0] == board[4] == board[8] == player:
        return True
    if board[2] == board[4] == board[6] == player:
        return True
    return False
# Define the main game loop
def main():
    # Start with player 1
    current_player = "X"
    # Loop until the game is over
    while True:
        # Print the current board
        print board()
        # Get the current player's move
        while True:
            move = input("Player " + current player + ", enter your move (1-9): ")
            if move.isdigit() and int(move) in range(1, 10) and board[int(move)-1] == "":
               break
            else:
                print ("Invalid move, try again.")
        # Update the board
        board[int(move)-1] = current_player
        # Check if the game is over
        if check win(current player):
            print board()
            print("Player " + current_player + " wins!")
        elif "" not in board:
            print board()
            print("Tie game!")
```

```
break
       # Switch to the other player
       current_player = "0" if current_player == "X" else "X"
# Start the game
main()
Player X, enter your move (1-9): 1
| X | |
Player 0, enter your move (1-9): 4
| X | |
0
Player X, enter your move (1-9): 8
| X |
0 |
| X |
Player 0, enter your move (1-9): 6
| X | |
0 | 0 |
   | X |
Player X, enter your move (1-9): 0
Invalid move, try again.
Player X, enter your move (1-9): 4
Invalid move, try again.
Player X, enter your move (1-9): 5
| X | | |
| O | X | O |
 | X | |
Player 0, enter your move (1-9): 7
```

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X	
O X O	
O X	
Player X, enter your move (1-9): 7 Invalid move, try again. Player X, enter your move (1-9): 2	
X X	
O X O	
O X	
Player X wins!	
In []:	
In []:	