Player Class

Represents a player in the game.

```
class Player:
    """Represents a player in the game."""

def __init__(self, symbol):
    """Initializes a Player object.

Args:
    symbol: The player's symbol ('X' or 'O').
    """
    self.symbol = symbol
```

Game Class

Manages the Tic-Tac-Toe game logic.

```
class Game:
  """Manages the Tic-Tac-Toe game logic."""
  def __init__(self):
       """Initializes a Game object."""
      self.board = [[' ' for _ in range(3)] for _ in range(3)]
      self.current_player = Player('X') # Start with 'X'
  def print_board(self):
       """Prints the current game board to the console."""
      print("----")
      for row in self.board:
          print("|", end=" ")
          for cell in row:
              print(cell, "|", end=" ")
          print()
          print("----")
  def get_player_move(self):
       """Gets and validates player input for their move."""
      while True:
          try:
               row, col = map(int, input(f"Player {self.current\_player.symbol}, enter row and column (1-3, 1-3): ").split()) 
              row -= 1 # Adjust to 0-based indexing
              if 0 \le row \le 3 and 0 \le col \le 3 and self.board[row][col] == ' ':
                  return row, col
               else:
                  print("Invalid move. Try again.")
           except ValueError:
              print("Invalid input. Please enter two numbers separated by a space.")
  def update_board(self, row, col):
       """Updates the game board with the current player's move."""
      self.board[row][col] = self.current_player.symbol
  def check_win(self):
       """Checks if the current player has won the game."""
       # Check rows
       for row in self.board:
           if all(cell == self.current_player.symbol for cell in row):
              return True
       # Check columns
       for col in range(3):
           if all(self.board[row][col] == self.current_player.symbol for row in range(3)):
              return True
```

```
# Check diagonals
    if all(self.board[i][i] == self.current_player.symbol for i in range(3)):
       return True
    if all(self.board[i][2 - i] == self.current_player.symbol for i in range(3)):
       return True
    return False
def check_draw(self):
    """Checks if the game is a draw."""
    return all(cell != ' ' for row in self.board for cell in row)
def switch_player(self):
    """Switches the current player to the other player."""
    self.current_player = Player('O') if self.current_player.symbol == 'X' else Player('X')
def play(self):
    """Runs the main game loop."""
    while True:
       self.print_board()
       row, col = self.get_player_move()
       self.update_board(row, col)
       if self.check_win():
           self.print_board()
           print(f"Player {self.current_player.symbol} wins!")
           break
        elif self.check_draw():
           self.print_board()
           print("It's a draw!")
           break
        self.switch_player()
```

Main Execution Block

Initializes the game and starts the game loop.

```
if __name__ == "__main__":
    game = Game()
    game.play()
```