3/19/24, 7:01 PM Snake and ladder

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In [1]:
        import random
        def move_player(position, steps):
            position += steps
            if position > 100:
                position = 100 - (position - 100)
            return position
        def climb_ladder(position):
            if position == 5:
                print("Climbing up the ladder!")
                return 75
            elif position == 8:
                print("Climbing up the ladder!")
                return 23
            return position
        def descend_snake(position):
            if position == 30:
                print("Bit by Snake!")
                return 16
            elif position == 40:
                print("Bit by Snake!")
                return 10
            return position
        def roll_dice():
            return random.randint(1, 6)
        def play_game():
            player_positions = [1, 1]
            players = ["Player 1", "Player 2"]
            current_player = 0
            while True:
                print("\n{}'s turn:".format(players[current_player]))
                input("Give a no. to roll the dice...")
                dice_roll = roll_dice()
                print("{} rolled a {}.".format(players[current_player], dice_roll))
                player_positions[current_player] = climb_ladder(descend_snake(move_player(r
                print("{}'s position: {}".format(players[current_player], player_positions[
                if player_positions[current_player] >= 100:
                     print("{} wins!!!".format(players[current_player]))
                     break
                current_player = (current_player + 1) % 2
        play_game()
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Player 1's turn: Give a no. to roll the dice...5 Player 1 rolled a 2. Player 1's position: 3 Player 2's turn: Give a no. to roll the dice...3 Player 2 rolled a 2. Player 2's position: 3 Player 1's turn: Give a no. to roll the dice...5 Player 1 rolled a 3. Player 1's position: 6 Player 2's turn: Give a no. to roll the dice...2 Player 2 rolled a 1. Player 2's position: 4 Player 1's turn: Give a no. to roll the dice...6 Player 1 rolled a 4. Player 1's position: 10 Player 2's turn: Give a no. to roll the dice...6 Player 2 rolled a 1. Climbing up the ladder! Player 2's position: 75 Player 1's turn: Give a no. to roll the dice...3 Player 1 rolled a 3. Player 1's position: 13 Player 2's turn: Give a no. to roll the dice...6 Player 2 rolled a 1. Player 2's position: 76 Player 1's turn: Give a no. to roll the dice...3 Player 1 rolled a 5. Player 1's position: 18 Player 2's turn: Give a no. to roll the dice...6 Player 2 rolled a 1. Player 2's position: 77 Player 1's turn: Give a no. to roll the dice...4 Player 1 rolled a 2. Player 1's position: 20 Player 2's turn: Give a no. to roll the dice...6 Player 2 rolled a 5. Player 2's position: 82 Player 1's turn: Give a no. to roll the dice...6 Player 1 rolled a 2.

Player 1's position: 22 Player 2's turn: Give a no. to roll the dice...6 Player 2 rolled a 5. Player 2's position: 87 Player 1's turn: Give a no. to roll the dice...5 Player 1 rolled a 4. Player 1's position: 26 Player 2's turn: Give a no. to roll the dice...6 Player 2 rolled a 2. Player 2's position: 89 Player 1's turn: Give a no. to roll the dice...6 Player 1 rolled a 4. Bit by Snake! Player 1's position: 16 Player 2's turn: Give a no. to roll the dice...5 Player 2 rolled a 1. Player 2's position: 90 Player 1's turn: Give a no. to roll the dice...3 Player 1 rolled a 5. Player 1's position: 21 Player 2's turn: Give a no. to roll the dice...3 Player 2 rolled a 5. Player 2's position: 95 Player 1's turn: Give a no. to roll the dice...6 Player 1 rolled a 1. Player 1's position: 22 Player 2's turn: Give a no. to roll the dice...6 Player 2 rolled a 2. Player 2's position: 97 Player 1's turn: Give a no. to roll the dice...4 Player 1 rolled a 5. Player 1's position: 27 Player 2's turn: Give a no. to roll the dice...3 Player 2 rolled a 5. Player 2's position: 98 Player 1's turn: Give a no. to roll the dice...5 Player 1 rolled a 4. Player 1's position: 31 Player 2's turn:

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Give a no. to roll the dice...4
        Player 2 rolled a 6.
        Player 2's position: 96
        Player 1's turn:
        Give a no. to roll the dice...4
        Player 1 rolled a 2.
        Player 1's position: 33
        Player 2's turn:
        Give a no. to roll the dice...2
        Player 2 rolled a 6.
        Player 2's position: 98
        Player 1's turn:
        Give a no. to roll the dice...2
        Player 1 rolled a 4.
        Player 1's position: 37
        Player 2's turn:
        Give a no. to roll the dice...2
        Player 2 rolled a 1.
        Player 2's position: 99
        Player 1's turn:
        Give a no. to roll the dice...5
        Player 1 rolled a 2.
        Player 1's position: 39
        Player 2's turn:
        Give a no. to roll the dice...3
        Player 2 rolled a 4.
        Player 2's position: 97
        Player 1's turn:
        Give a no. to roll the dice...5
        Player 1 rolled a 6.
        Player 1's position: 45
        Player 2's turn:
        Give a no. to roll the dice...4
        Player 2 rolled a 3.
        Player 2's position: 100
        Player 2 wins!!!
In [ ]:
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