## Leaping Frog Game

## This is a demonstration of a game "Leaping Frog" a puzzle game



## Rules

1. The left set of frogs can only move right, the right set of frogs can only move left.

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Frogs can move forward one space, or move two spaces by jumping over another frog from opposite side.
          The puzzle is solved when the two sets of frogs have switched positions.
In [2]: position = ['G', 'G', 'G', '-', 'B', 'B', 'B']
        winning = ['B', 'B', 'B', '-', 'G', 'G', 'G']
        print([0, 1, 2, 3, 4, 5, 6])
        print (position)
        while position != winning:
            pos = input(str("Press q to quit else \nEnter position of piece:"))
            if pos == "q":
                print ("YOU LOSE")
                 break
            else:
                pos = int(pos)
            if not (0 <= pos <= 6):
                print ("Invalid move")
                 continue
             if position[pos] == "-":
                print ("Invalid Move")
                 continue
            pos2 = 0
            if position[pos] == 'G':
                if pos + 1 <= 6 and position[pos + 1] == '-':</pre>
                    pos2 = pos + 1
                elif pos + 2 <= 6 and position[pos + 2] == '-':
                    pos2 = pos + 2
                    print ("Invalid Move")
                    continue
            if position[pos] == 'B':
                if pos - 1 >= 0 and position[pos - 1] == '-':
                    pos2 = pos - 1
                elif pos - 2 >= 0 and position[pos - 2] == '-':
                    pos2 = pos - 2
                    print("Invalid Move")
                    continue
            position[pos], position[pos2] = position[pos2], position[pos]
            print (position)
        if position == winning:
            print ('YOU WON')
        [0, 1, 2, 3, 4, 5, 6]
        ['G', 'G', 'G', '-', 'B', 'B', 'B']
        Press q to quit else
        Enter position of piece:4
        ['G', 'G', 'G', 'B', '-', 'B', 'B']
        Press q to quit else
        Enter position of piece:2
        ['G', 'G', '-', 'B', 'G', 'B', 'B']
        Press q to quit else
        Enter position of piece:1
        ['G', '-', 'G', 'B', 'G', 'B', 'B']
        Press q to quit else
        Enter position of piece:3
        ['G', 'B', 'G', '-', 'G', 'B', 'B']
        Press q to quit else
        Enter position of piece:5
        ['G', 'B', 'G', 'B', 'G', '-', 'B']
        Press q to quit else
        Enter position of piece:6
        ['G', 'B', 'G', 'B', 'G', 'B', '-']
        Press q to quit else
        Enter position of piece:4
        ['G', 'B', 'G', 'B', '-', 'B', 'G']
        Press q to quit else
        Enter position of piece:2
        ['G', 'B', '-', 'B', 'G', 'B', 'G']
        Press q to quit else
        Enter position of piece:00
        ['-', 'B', 'G', 'B', 'G', 'B', 'G']
        Press q to quit else
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sol 4,2,1,3,5,6,4,2,0,1,3,5,4,2,3

Enter position of piece:1

Enter position of piece:3

Enter position of piece:5

Enter position of piece:4

Enter position of piece:2

Enter position of piece:3

Press q to quit else

YOU WON

['B', '-', 'G', 'B', 'G', 'B', 'G']

['B', 'B', 'G', '-', 'G', 'B', 'G']

['B', 'B', 'G', 'B', 'G', '-', 'G']

['B', 'B', 'G', 'B', '-', 'G', 'G']

['B', 'B', '-', 'B', 'G', 'G', 'G']

['B', 'B', 'B', '-', 'G', 'G', 'G']