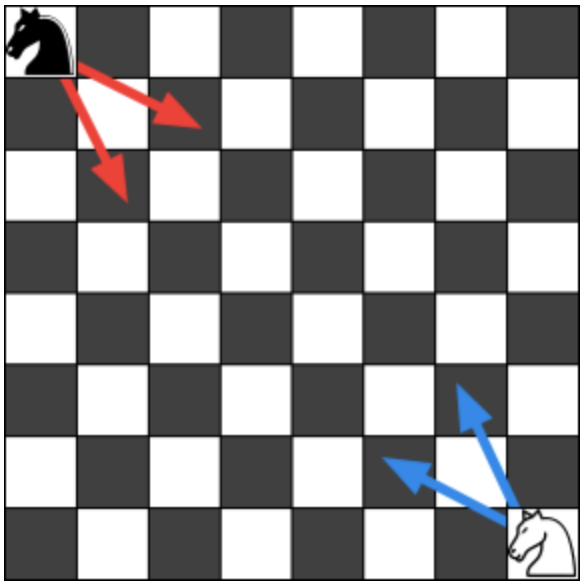
Traveling Knights

A White and a Black chess knight are placed at opposite corners of a chessboard. A game is played wherein the knights make random valid moves in alternating turns, with White moving first. The game ends when Black captures White (the white knight cannot capture the black knight). Before that happens, White is said to be alive.

The probability that White is still alive once Black has made 6 moves is 0.90531081, rounded to 8 decimal places.

What is the probability, rounded to 8 decimal places, that White is still alive once Black has made **32** moves?



Goal to meet and beat: 1.8s (interpreted Python)