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Monty-Hall Reflection

I have never heard of the Monty-hall problem until it was explained in class. Although I’ve never watched the show, it seems fun but deceptively tricky. Initially, like most people, I thought that once a door was removed from play, you would have a 50/50 chance to win the prize. But as we learned it isn't so simple as that. Based on my graph and simulations, the more trials that were run, the closer the win rate percentage got to 33% or ⅓. This was a result of the specified requirements to show not switching doors. It now makes more sense to me why you have better odds to switch doors instead of staying. As the 2 remaining doors combine together to make a ⅔ odd chance of winning instead of staying on the original door which is just ⅓. This assignment has taught me to try to think deeper about problems that seem simple on the surface. I honestly tried multiple times to run my simulation for 100,000 iterations. I left my computer running overnight and it still wouldn't output the graph. I submitted 20,000 instead to at least show double the asked for 10,000 iterations.