

# User Manual

This will run 10,000 simulations of the game show "Let's Make a Deal". In the game, the host, Monty Hall, will ask you to pick 1 out of 3 doors available. One of the doors has a car behind it. The program will randomly assign you a door to choose. After that, Monty Hall will reveal 1 door that has a goat behind it. After that, he will ask you if you would like to switch your door choice among the 2 remaining doors. The program is designed to show you statistically what percentage of the time the player is correct if he/she does not change his/her answer, and what percentage of the time he/she is correct if he/she does change his/her answer. The program will print out how many times the player was correct by not switching and give a percentage of total simulations and will do the same if the player were to switch. At the end, the program will tell you what is advantage to choose.

# System Manual

`SetupDoors()` sets up the doors for the game show. It is implied that the doors already have content behind them (or specifically a car and 2 goats). If you attempt to run the program without defining `door1` `door2` and `door3` the function will not run properly and will give you an error message. The function is designed to reassign what is behind each door. The way the function does this by generating a random number between 1 and 3 and that will represent what door gets the car behind it.

`pickDoorChoice()` randomly assigns the player a number between 1 and 3 representing what door the player chose. Then it will pick a door for Monty to reveal by randomly generating numbers until the number is different from the player's and does not have a car behind it.

`main()` has two counter ints, `stayRight` and `stayWrong` that serve to keep track of the statistics throughout the simulations. Read the comments in the code and its fairly simple. Displays the statistics at the end and draws a conclusion based on the statistics.