

Summit Singh Thakur

st866@drexel.edu

03 March 2017

CS-171-C, Lab Section 065

Homework 4 Conclusions

Random Runs

#	Switch Wins	Stay Wins
1	66.38%	33.62%
2	66.94%	33.06%
3	66.60%	33.40%
4	66.69%	33.31%
5	66.52%	33.48%

- By seeing the results, one can conclude that if a player stays with his first choice, then player has a higher chance of winning a car.
- If a player switches the choice when asked by Monty Hall, then player has a lesser chance of winning a car.
- As seen from the several results above and running the game 10000 times in the program, the percentage of wins varies by a small margin.
- Overall, one can observe that the player has a higher chance of winning a car rather than if player switches his choice when asked by Monty Hall.

```
C:\WINDOWS\system32\cmd.exe
Is it to the player's advantage to switch doors after Monty tells them?
Monty Hall Problem
Percent Win    Number of Wins
Switch Wins    66.38%    6638.00
Stay Wins      33.62%    3362.00
Press any key to continue . . .
```

```
C:\WINDOWS\system32\cmd.exe
Is it to the player's advantage to switch doors after Monty tells them?
Monty Hall Problem
Percent Win    Number of Wins
Switch Wins    66.94%    6694.00
Stay Wins      33.06%    3306.00
Press any key to continue . . .
```

```
C:\WINDOWS\system32\cmd.exe
Is it to the player's advantage to switch doors after Monty tells them?

Monty Hall Problem
Percent Win    Number of Wins
Switch Wins    66.60%    6660.00
Stay Wins      33.40%    3340.00
Press any key to continue . . .
```

```
C:\WINDOWS\system32\cmd.exe
Is it to the player's advantage to switch doors after Monty tells them?

Monty Hall Problem
Percent Win    Number of Wins
Switch Wins    66.69%    6669.00
Stay Wins      33.31%    3331.00
Press any key to continue . . .
```

```
C:\WINDOWS\system32\cmd.exe
Is it to the player's advantage to switch doors after Monty tells them?
Monty Hall Problem
      Percent Win      Number of Wins
Switch Wins      66.52%      6652.00
Stay Wins        33.48%      3348.00
Press any key to continue . . .
```