## collected

## September 12, 2023

[]: import random

```
a = random.randint(0,9)
     print(a)
    0
[]: door = [1,2,3]
     total = 0
     win = 0
     win_n=0
     for i in range(1,10000000):
         door_list = door[:]
         final_choice = door[:]
         choice = random.randint(1,3)
         correct = random.randint(1,3)
         if choice == correct:
             win_n = win_n +1
         #print(door_list)
         #print(choice)
         #print(correct)
         door_list.remove(choice)
         for item in door_list:
             if item == correct:
                 door_list.remove(correct)
         a = random.randint(0,len(door_list)-1)
         door_removed = door_list.pop(a)
         #print(door_removed)
         #print(final_choice)
         final_choice.remove(door_removed)
         final_choice.remove(choice)
         final_choice= final_choice.pop(0)
         if final_choice == correct:
             win = win+1
         total = total+1
     print("Total: ",total )
     print("Win Not Switching: ",win_n )
```

```
print("Win Switching: ", win )

percentage = (win/total)*100
print("Win Rate switching: ",percentage,"%")
percentage = (win_n/total)*100
print("Win Rate not switching: ",percentage,"%")
```

Total: 9999999

Win Not Switching: 3333974 Win Switching: 6666025

Win Rate switching: 66.66025666602566 % Win Rate not switching: 33.33974333397433 %