

Russian_Roulette

August 21, 2021

```
[30]: import random
import os
import sys
```

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[31]: chambers=6
```

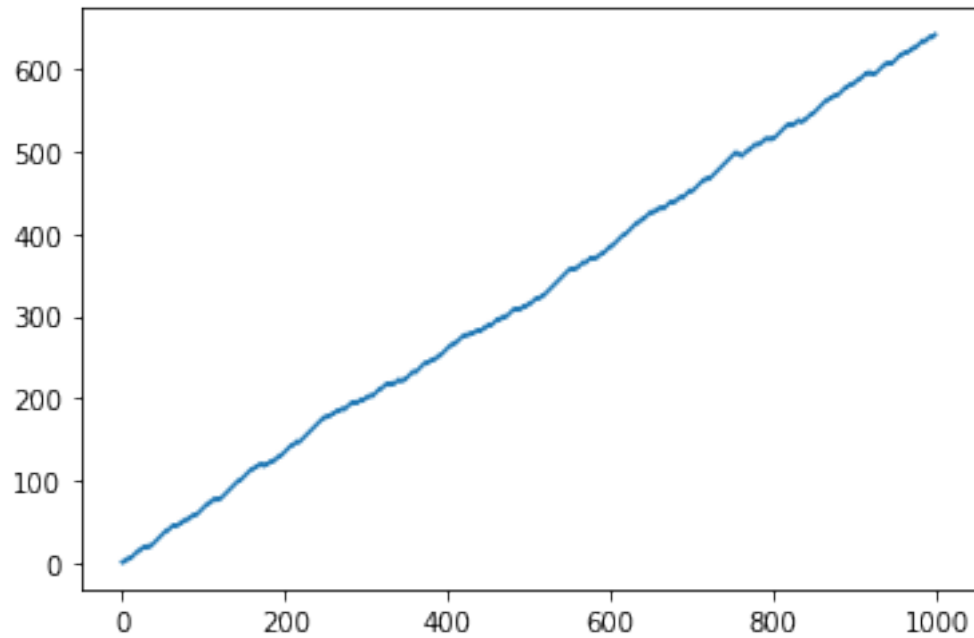
```
[32]: sum = 0
T=0
y=[]

living=0
dying=0
```

```
[33]: for i in range(0,1000):
    fatal_bullet=random.randint(1,int(chambers))
    bullet=random.randint(1,int(chambers))

    if bullet==fatal_bullet:
        sum = sum - 1
        dying+=1
    else:
        sum = sum + 1
        living+=1
    y.append(sum)
```

```
[34]: from matplotlib import pyplot as plt
plt.plot(y)
plt.show()
```



1/6 chance of dying, 5/6 chance of surviving

```
[35]: total=living+dying  
      living_prob=living/total  
      dying_prob=dying/total
```

```
[36]: print(living_prob)  
      print(dying_prob)
```

```
0.821  
0.179
```