

Doing something with a certain probability

```
>>> import random
>>> random.uniform(0,1)
0.18823475347158825
>>> random.uniform(0,1)
0.7056607731560592
>>> random.uniform(0,1)
0.7372915229645327
```

Doing something with a certain probability

```
def russianRoulette(probability):
    if ???
        print 'you lose'
    else:
        print 'you win...please play again'
```



Doing something with a certain probability

```
def russianRoulette(probability):
    if random.uniform(0,1) < prob:
        print 'you lose'
    else:
        print 'you win...please play again'
```



Generating DNA sequences

Probability of A = .4, prob of C = .2, prob of T = .3, prob of G = .1

```
def seqGen(probA, probC, probT, probG, len) :
    import random
    seq = ''
    for i in range(len) :
        num = random.uniform(0,1)
        if num < probA :
            seq = seq + 'a'
        elif num < probA + probC :
            seq = seq + 'c'
        elif num < probA + probC + probT :
            seq = seq + 't'
        else :
            seq = seq + 'g'
    return seq
```