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1  """
2  EE 381 Project 3 part 1
3  Shawn Joseph 025671644
4  """
5
6  import random
7  p = float(input("Enter probability of success"))
8  T = int(input("How many trials? "))
9
10 for i in range(T):
11     r = random.uniform(0, 1)
12     if r < p:
13         print('1', end=' ')
14     else:
15         print('0', end=' ')
16
```

```
1  """
2  EE 381 Project 3 part 2
3  Shawn Joseph 025671644
4  """
5
6  import random
7
8  RecLoc = []
9
10 p_A = float(input("Enter the probability of leaving '
11 0' and going to '1'. "))
12
13 q_B = float(input("Enter the probability of leaving '
14 1' and going to '0'. "))
15
16 S = int(input("Enter either a '0' or '1' as a
17 starting state. "))
18 RecLoc.append(S)
19
20 for i in range(24):
21     r = random.uniform(0, 1)
22     if S == 0 and r < p_A:
23         S = 1
24     elif S == 1 and r < q_B:
25         S = 0
26     RecLoc.append(S)
27
28 for i in RecLoc:
29     print(i, end=' ')
30
```