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File Edit Code Cell Run Kernel Environment Tools Git Window Help EE 381 fall 2022 Computer Assignment 1.py - Aaron_Garcia Computer Assignment 2 Program.py [CSULBFall2022]
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Aaron_Garcia Computer Assignment 2 Program.py Aaron_Garcia Comput: Aaron_Garcia Computer Assignment 2 Program Aaron_Garcia Computer Assignment 2 Program (1)
Run in:
37 # (NOT the same as the number of
38 # individual trials in a given experiment)
39 reps = 1000000
40
41 # For each probability:
42 for p in arr_p:
43     fav_outcomes = 0
44     # do "reps" num of repetitions of the
45     # same experiment using the probability
46     for rep in range(reps):
47         t=0 # Number of Trials = Failures + 1
48         # BEGIN EXPERIMENT:
49         while(True): # While we keep getting a failure
50             t = t+1 # Increment Trials
51             r = random.uniform(0,1)
52             if r < p:
53                 #print('h', end=' ') # Debug
54                 break #Once we succeed, break
55             #else:
56                 #print('t', end='') # Debug
57             if (t % 2 == 1):
58                 #print(('Odd! (' + str(t) + ')'), end=' ')
59                 fav_outcomes += 1
60 print("", end="\n")
61 print("Stats for coin flipping heads with probability =")
62 print("Final favorable outcomes: \n" + str(fav_outcomes))
63 print("Estimated probability of landing on an odd number first:")
64
ExerciseThree() for p in arr_p
> Special Variables

In this computer assignment, we will be testing for
the probability of the amount of coin flips it takes
to receive heads on an odd number.

Stats for coin flipping heads with probability =
0.2
Final favorable outcomes:
555674/1000000
Estimated probability of landing on an odd number first:
0.555674

Stats for coin flipping heads with probability =
0.5
Final favorable outcomes:
665919/1000000
Estimated probability of landing on an odd number first:
0.665919

Stats for coin flipping heads with probability =
0.6666666666666666
Final favorable outcomes:
750233/1000000
Estimated probability of landing on an odd number first:
0.750233

62:83 CRLF UTF-8 4 spaces Python 3.9 (base) main
```