

In the first code, I made I got the result below. I noticed that for experiments 10, 50, and 90, there is a common relative frequency that will be very close to 0.50. I ran the code a couple of times and I ended up with these last two as the results.

The Azure balls = 10 out of 100,
The relative frequency is 0.529
The Azure balls = 50 out of 100,
The relative frequency is 0.507
The Azure balls = 90 out of 100,
The relative frequency is 0.514

The Azure balls = 10 out of 100,
The relative frequency is 0.514
The Azure balls = 50 out of 100,
The relative frequency is 0.506
The Azure balls = 90 out of 100,
The relative frequency is 0.535

I also made another code that took the frequency of the azure ball being the last ball and resulted in this:

When a = 10
The frequency of azure ball being the last ball is: 981
When a = 50
The frequency of azure ball being the last ball is: 1017
When a = 90
The frequency of azure ball being the last ball is: 975

When a = 10
The frequency of azure ball being the last ball is: 995
When a = 50
The frequency of azure ball being the last ball is: 994
When a = 90
The frequency of azure ball being the last ball is: 981