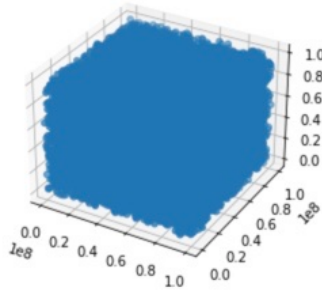


Problem 1

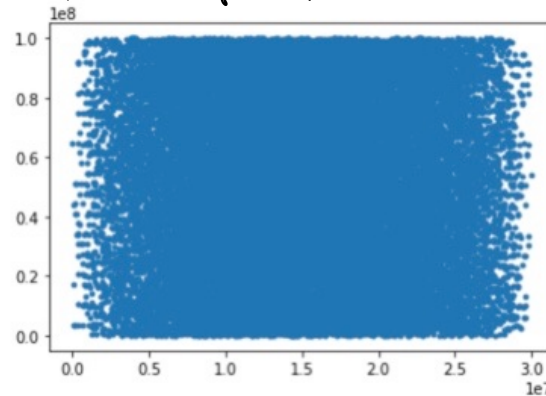
Attempt @ 3D plot (first time doing this, couldn't get a decent view of planes!)

Graph 1: 3D plot of RNs.



2D plot w/ $a=0.2$, $b=0.1$

Graph 2: 2D plot of RNs.



NOTE : Was able to run the script on my own machine. SO this is the result from the rand-points.txt outputted from when I ran the code.

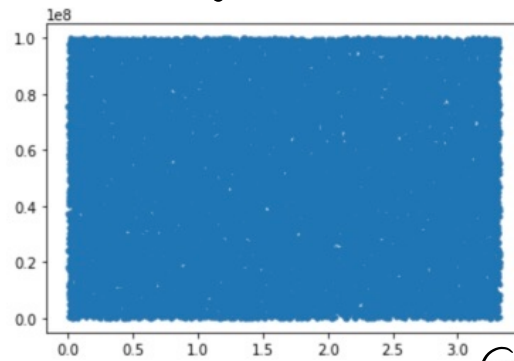
Visually, we see that graph 2 represents not actually "random" RNs. This is due to the "striped" quality of the plot.

Need to compare to Python's RNG.

Number of random #s in Jon's script: 30250

Jon rejects RNs $> 10^8$, but couldn't do that, so I generated RNs b/w 0 and 10^8 .

Graph 3: Python RNG



a, b same as
above

1e15 — But diff. size $x+y$ value?

I used the `random.randint(0, 108)` function to generate.

Visually, there seems to be no "striped" aspect, i.e. no planes.
So a better pseudo RNG?