

Number of samples = number of bins=100

1

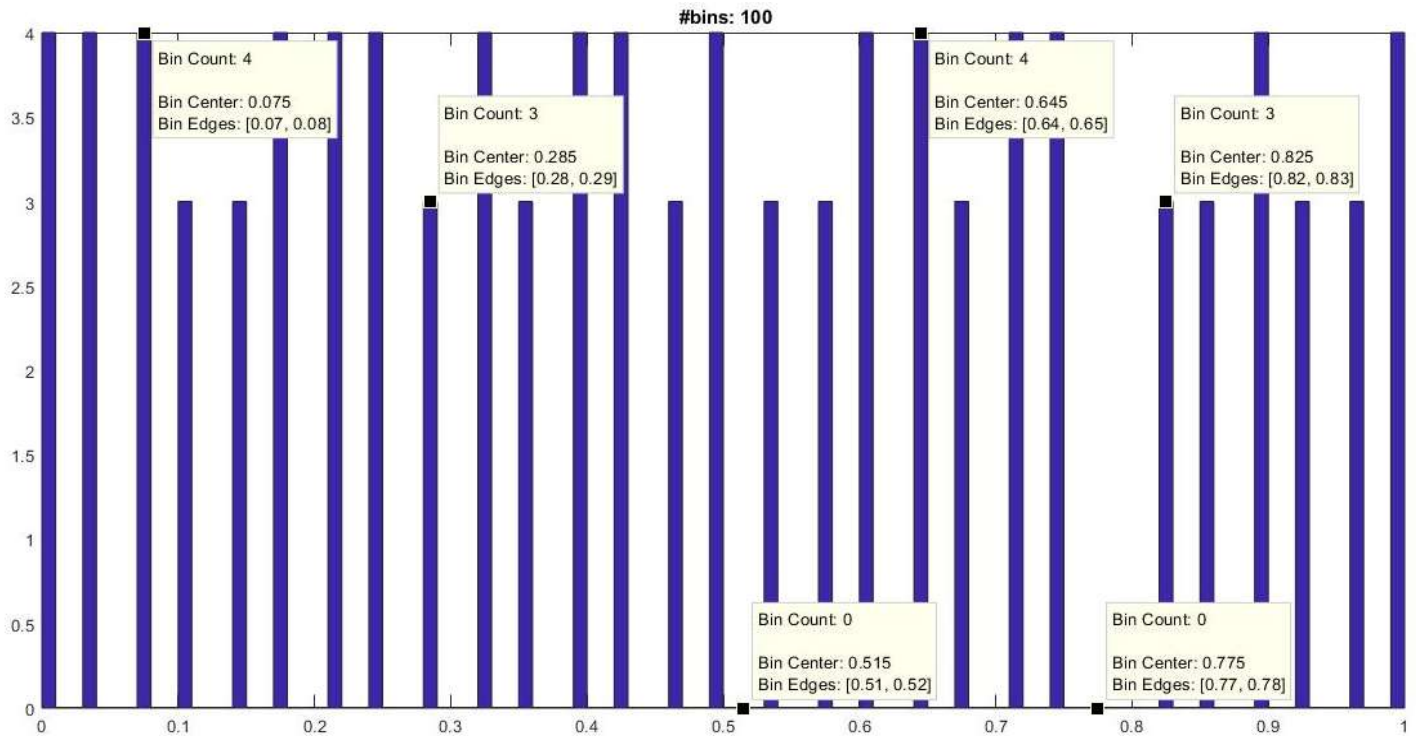
linear congruential generator Method

m is the integer modulus=29

b the increment $\{0 \leq b < m\} = 7$

the "seed" or "start value $x=1$

a the multiplier=2



multiple recursive generator method

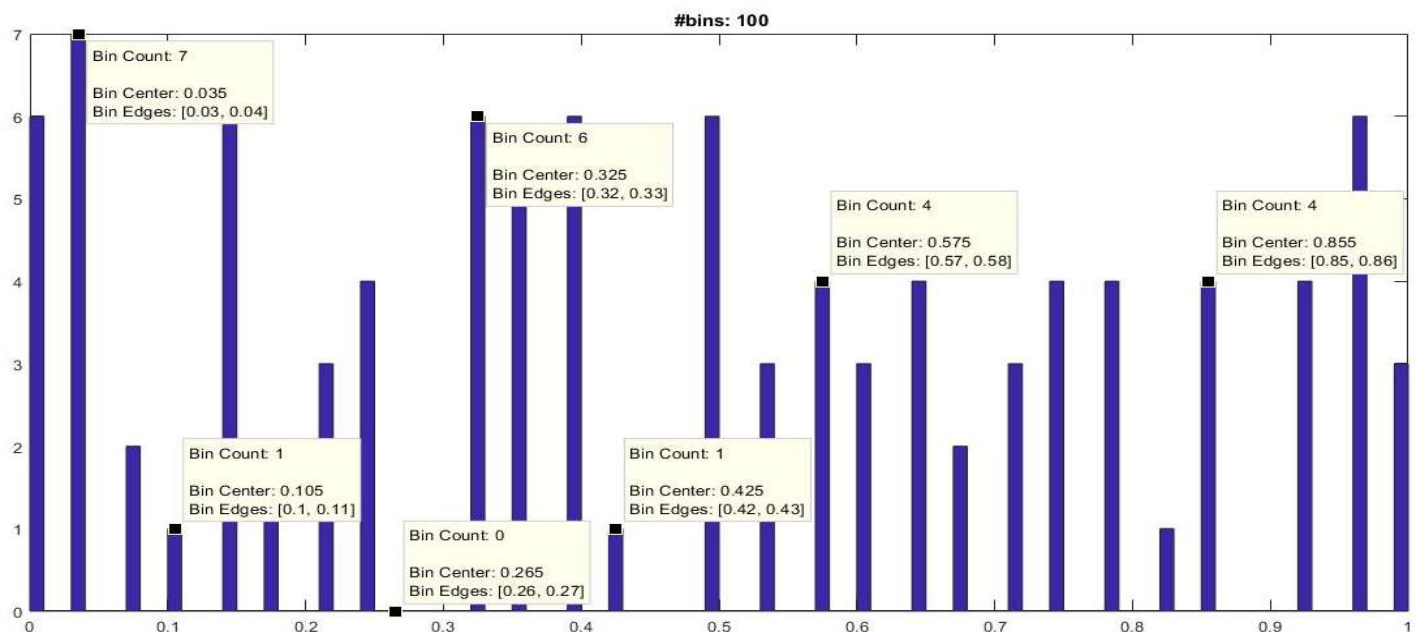
m is the integer modulus=29

b the increment $\{0 \leq b < m\} = 7$

the "seed" or "start value $x=1$

second value of $x=2$

a the multiplier=2



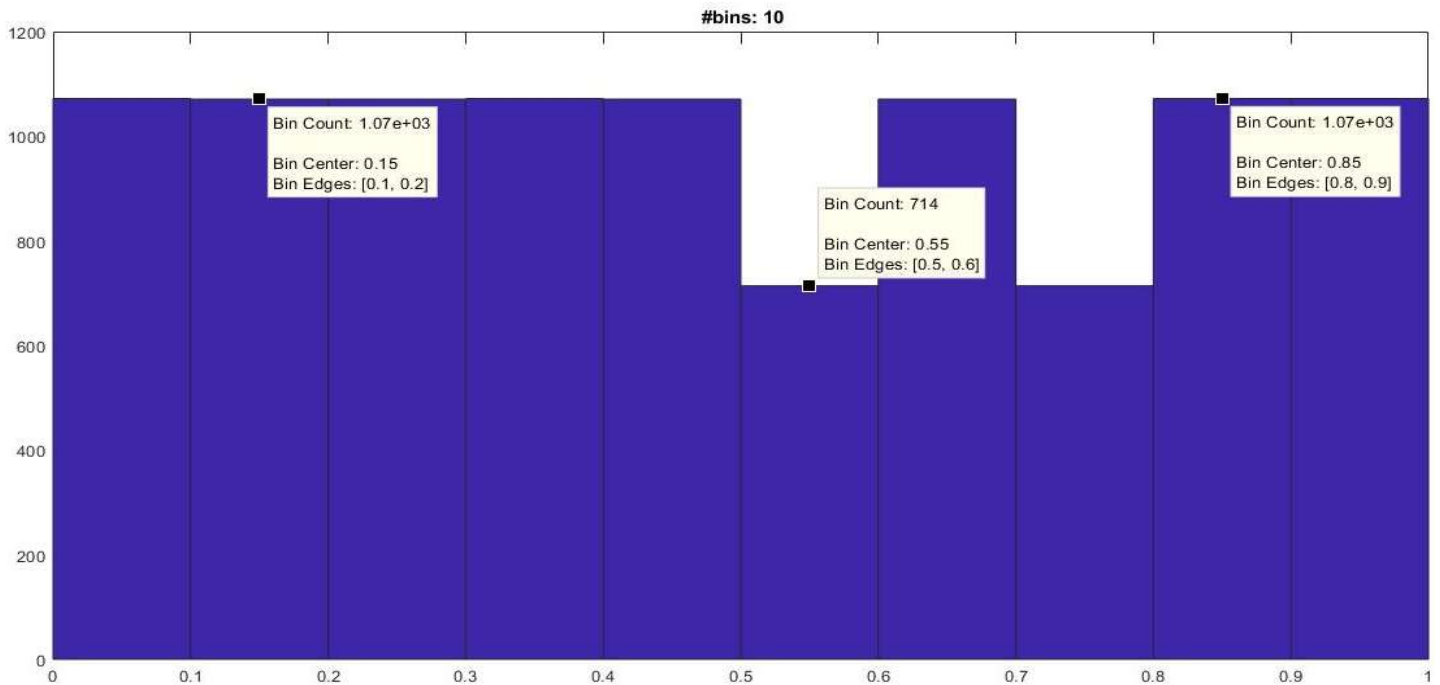
Number of samples: 10000

Number of bins: 10

linear congruential generator Method

m is the integer modulus=29
the "seed" or "start value x=1

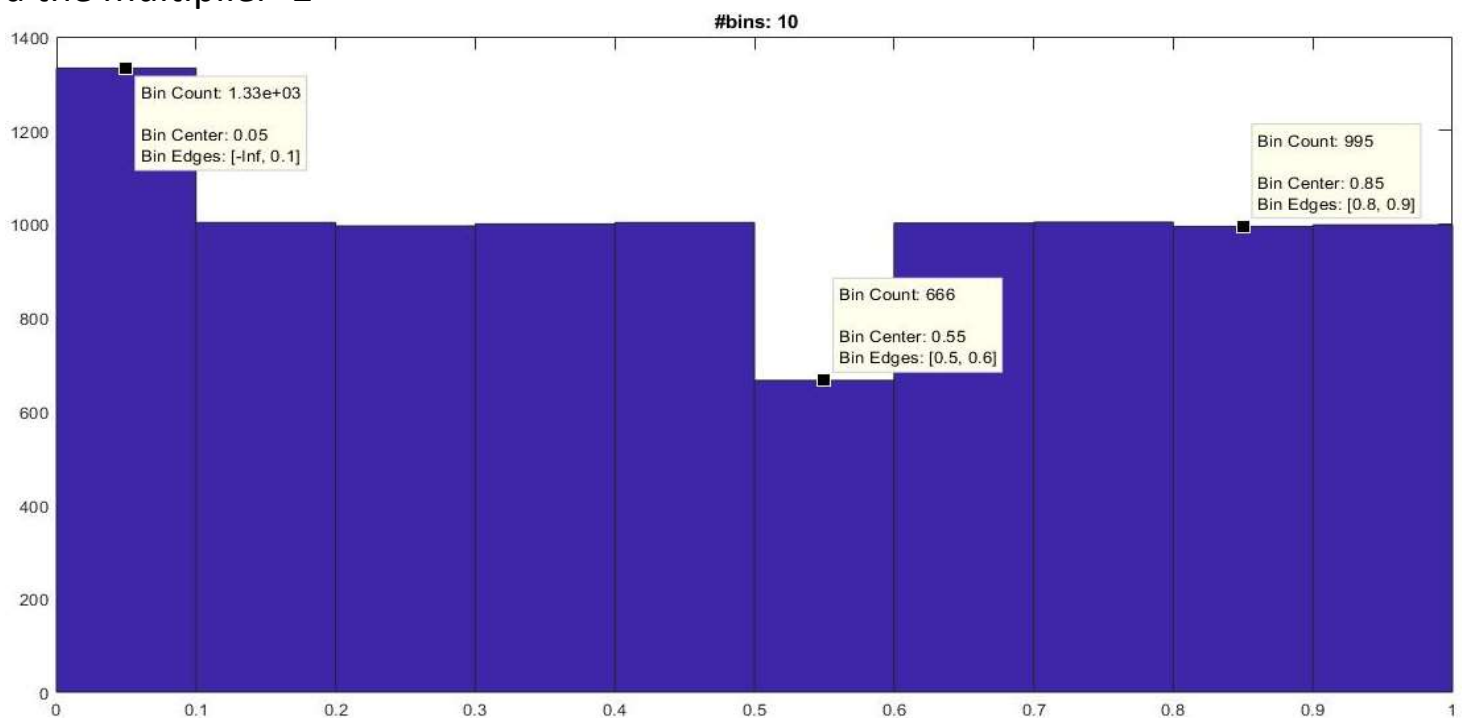
b the increment $\{0 \leq b < m\} = 7$
a the multiplier=2



multiple recursive generator method

m is the integer modulus=29
the "seed" or "start value x=1
a the multiplier=2

b the increment $\{0 \leq b < m\} = 7$
second value of x=2



In the above I uses 2 method to generate the random number one is linear congruential generator method and other one multiple recursive generator method and found similar result as in part(a).when number of sample is very high compare to number of bin then number of bin in given interval is almost equal.but when number of sample is comparable to number of bin then number of bin in given interval is uncertain,i.e in some interval number of bin is very high and in some interval it is very low or may be zero.