

The Results and Discussion

1. Experiment 1

We did 1000 times experiment for every n , and calculate the *mean of connections*, as shown in Figure 1.

N	Mean of Connections	$\frac{1}{2}n \ln n$	Experiment times
100	262.922	230.259	1000
200	588.799	529.832	1000
300	946.115	855.567	1000
1000	3740.25	3453.878	1000
10000	48985.898	46051.702	1000
20000	105226.293	99034.876	1000
40000	223258.104	211932.695	1000
51200	292260.512	277593.467	1000
102400	621350.582	590676.07	1000

Figure 1 Comparison Between Connections and $\frac{1}{2}n \ln n$

According to the table, with the increasing of n (number of sites), it shows that the *mean of connections* is close to $\frac{1}{2}n \ln n$, in the condition of 1000 experiment for every n .

2. Experiment 2

We calculate all n from 0-51200 to estimate the *Connection*, with 100 times for each n .

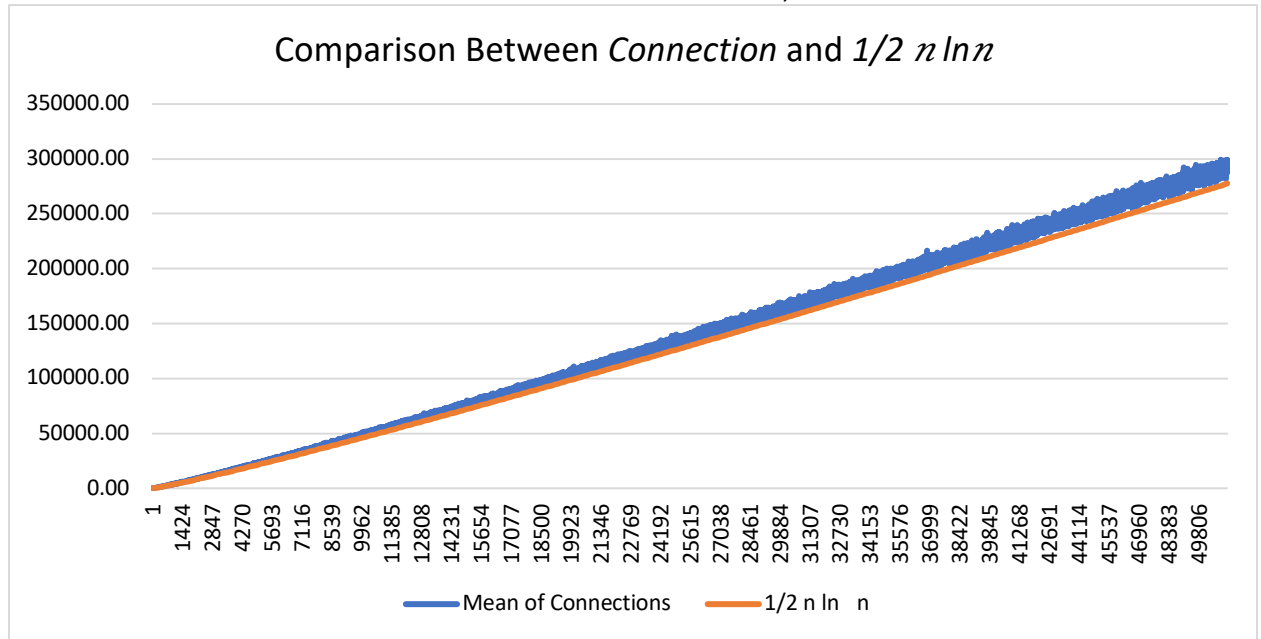


Figure 2 Comparison Between Connection and $\frac{1}{2}n \ln n$

As we can see from Figure 2, *Mean of Connections* is close to $\frac{1}{2}n \ln n$.