Assignment2

The test results:
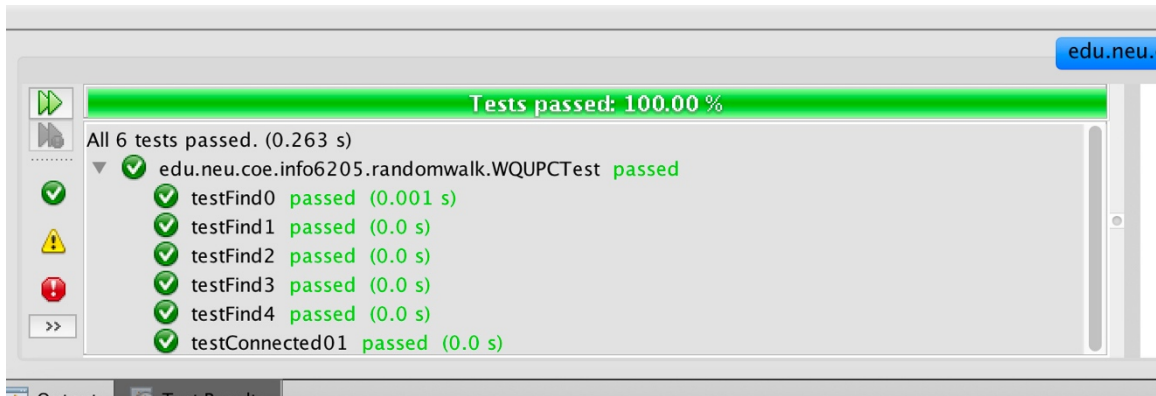
The results of programming:

N	Site	Math outcomes
46	103.1635	88.05875
178	519.2585	461.1787
256	789.5595	709.7827
367	1200.32	1083.6339
478	1606.801	1474.5370
688	2454.977	2247.6234
950	3524.2945	3256.8194
1200	4604.483	4254.0461
1400	5509.984	5070.9592
2500	10459.949	9780.0575
3800	16740.0865	15661.2370
5600	25811.87	24165.4612
6900	32726.38	30495.5045
7800	37272.522	34951.3281
12000	59968.8275	56355.9715
16000	82082.5025	77442.7520

We can see that the the the number of pairs generated is ~ *1/2 n log n* where *log n* is the natural logarithm of *n*.

Site

90000
67500
45000
22500
0

0   4000   8000   12000   16000

数值轴

Site   Math outcomes

90000
67500
45000
22500
0