Testing average cycles for attraction strength 0.2  
Number of cycles run: 7904  
Number of cycles run: 1851  
Number of cycles run: 10856  
Number of cycles run: 2805  
Number of cycles run: 1925  
Number of cycles run: 8107  
Number of cycles run: 16253  
Number of cycles run: 3000  
Number of cycles run: 3243  
Number of cycles run: 2304  
Number of cycles run: 3827  
Number of cycles run: 50000  
Number of cycles run: 37224  
Number of cycles run: 1596  
Number of cycles run: 3145  
Number of cycles run: 50000  
Number of cycles run: 1334  
Number of cycles run: 12136  
Number of cycles run: 2310  
Number of cycles run: 3797  
Number of cycles run: 3431  
Number of cycles run: 4905  
Number of cycles run: 3156  
Number of cycles run: 2416  
Number of cycles run: 3943  
Number of cycles run: 6586  
Number of cycles run: 2744  
Number of cycles run: 2109  
Number of cycles run: 1310  
Number of cycles run: 1848  
Number of cycles run: 20746  
Number of cycles run: 1267  
Number of cycles run: 2084  
Number of cycles run: 4043  
Number of cycles run: 4855  
Number of cycles run: 50000  
Number of cycles run: 1734  
Number of cycles run: 3523  
Number of cycles run: 3306  
Number of cycles run: 2529  
Number of cycles run: 2151  
Number of cycles run: 2292  
Number of cycles run: 2216  
Number of cycles run: 2378  
Number of cycles run: 50000  
Number of cycles run: 1529  
Number of cycles run: 919  
Number of cycles run: 897  
Number of cycles run: 3107  
Number of cycles run: 2660  
Av cycles for attraction strength 0.2 is 8366  
standard diviation is 13783.954370993564  
Testing average cycles for attraction strength 0.2  
Number of cycles run: 4109  
Number of cycles run: 2148  
Number of cycles run: 2019  
Number of cycles run: 3397  
Number of cycles run: 3302  
Number of cycles run: 17355  
Number of cycles run: 2307  
Number of cycles run: 1614  
Number of cycles run: 1679  
Number of cycles run: 3533  
Number of cycles run: 2502  
Number of cycles run: 50000  
Number of cycles run: 4131  
Number of cycles run: 2633  
Number of cycles run: 2512  
Number of cycles run: 1990  
Number of cycles run: 50000  
Number of cycles run: 15215  
Number of cycles run: 4192  
Number of cycles run: 2333  
Number of cycles run: 50000  
Number of cycles run: 25409  
Number of cycles run: 2819  
Number of cycles run: 12064  
Number of cycles run: 941  
Number of cycles run: 2916  
Number of cycles run: 3156  
Number of cycles run: 979  
Number of cycles run: 6065  
Number of cycles run: 9420  
Number of cycles run: 50000  
Number of cycles run: 3019  
Number of cycles run: 16593  
Number of cycles run: 3122  
Number of cycles run: 1409  
Number of cycles run: 1053  
Number of cycles run: 15130  
Number of cycles run: 7808  
Number of cycles run: 1229  
Number of cycles run: 3299  
Number of cycles run: 2468  
Number of cycles run: 2199  
Number of cycles run: 12057  
Number of cycles run: 5055  
Number of cycles run: 3457  
Number of cycles run: 3240  
Number of cycles run: 2940  
Number of cycles run: 4203  
Number of cycles run: 909  
Number of cycles run: 39887  
Av cycles for attraction strength 0.2 is 9396  
standard diviation is 14011.525168057262  
Testing average cycles for attraction strength 0.2  
Number of cycles run: 2948  
Number of cycles run: 1977  
Number of cycles run: 50000  
Number of cycles run: 15448  
Number of cycles run: 3174  
Number of cycles run: 1275  
Number of cycles run: 2269  
Number of cycles run: 1626  
Number of cycles run: 2788  
Number of cycles run: 8849  
Number of cycles run: 5547  
Number of cycles run: 1440  
Number of cycles run: 1928  
Number of cycles run: 9624  
Number of cycles run: 3480  
Number of cycles run: 2305  
Number of cycles run: 1498  
Number of cycles run: 1571  
Number of cycles run: 39351  
Number of cycles run: 3218  
Number of cycles run: 6293  
Number of cycles run: 7714  
Number of cycles run: 1822  
Number of cycles run: 1193  
Number of cycles run: 1940  
Number of cycles run: 2044  
Number of cycles run: 4004  
Number of cycles run: 4860  
Number of cycles run: 3968  
Number of cycles run: 3363  
Number of cycles run: 2144  
Number of cycles run: 50000  
Number of cycles run: 895  
Number of cycles run: 50000  
Number of cycles run: 2226  
Number of cycles run: 1859  
Number of cycles run: 3597  
Number of cycles run: 1035  
Number of cycles run: 1496  
Number of cycles run: 50000  
Number of cycles run: 2362  
Number of cycles run: 3520  
Number of cycles run: 2543  
Number of cycles run: 7599  
Number of cycles run: 1661  
Number of cycles run: 2089  
Number of cycles run: 2230  
Number of cycles run: 978  
Number of cycles run: 50000  
Number of cycles run: 2331  
Av cycles for attraction strength 0.2 is 8721  
standard diviation is 15032.519132187786  
Testing average cycles for attraction strength 0.2  
Number of cycles run: 931  
Number of cycles run: 3581  
Number of cycles run: 2516  
Number of cycles run: 1777  
Number of cycles run: 50000  
Number of cycles run: 50000  
Number of cycles run: 3626  
Number of cycles run: 2490  
Number of cycles run: 3054  
Number of cycles run: 3232  
Number of cycles run: 2020  
Number of cycles run: 832  
Number of cycles run: 2228  
Number of cycles run: 1199  
Number of cycles run: 50000  
Number of cycles run: 2591  
Number of cycles run: 3409  
Number of cycles run: 3200  
Number of cycles run: 4795  
Number of cycles run: 3463  
Number of cycles run: 1738  
Number of cycles run: 3524  
Number of cycles run: 1071  
Number of cycles run: 2108  
Number of cycles run: 2929  
Number of cycles run: 2237  
Number of cycles run: 1051  
Number of cycles run: 3640  
Number of cycles run: 3202  
Number of cycles run: 4934  
Number of cycles run: 1696  
Number of cycles run: 3347  
Number of cycles run: 37389  
Number of cycles run: 1882  
Number of cycles run: 5737  
Number of cycles run: 24207  
Number of cycles run: 2188  
Number of cycles run: 1294  
Number of cycles run: 11787  
Number of cycles run: 50000  
Number of cycles run: 2082  
Number of cycles run: 1061  
Number of cycles run: 2057  
Number of cycles run: 4174  
Number of cycles run: 50000  
Number of cycles run: 1064  
Number of cycles run: 1350  
Number of cycles run: 26066  
Number of cycles run: 1883  
Number of cycles run: 3434  
Av cycles for attraction strength 0.2 is 9081  
standard diviation is 15320.777283846417  
Testing average cycles for attraction strength 0.2  
Number of cycles run: 3652  
Number of cycles run: 12320  
Number of cycles run: 1208  
Number of cycles run: 12990  
Number of cycles run: 3572  
Number of cycles run: 14933  
Number of cycles run: 2056  
Number of cycles run: 1417  
Number of cycles run: 1811  
Number of cycles run: 2778  
Number of cycles run: 2593  
Number of cycles run: 1475  
Number of cycles run: 3205  
Number of cycles run: 3765  
Number of cycles run: 50000  
Number of cycles run: 807  
Number of cycles run: 2254  
Number of cycles run: 3322  
Number of cycles run: 1966  
Number of cycles run: 2261  
Number of cycles run: 1337  
Number of cycles run: 3736  
Number of cycles run: 10803  
Number of cycles run: 5977  
Number of cycles run: 1654  
Number of cycles run: 2547  
Number of cycles run: 2534  
Number of cycles run: 3239  
Number of cycles run: 1187  
Number of cycles run: 1777  
Number of cycles run: 2334  
Number of cycles run: 2541  
Number of cycles run: 1108  
Number of cycles run: 3795  
Number of cycles run: 3448  
Number of cycles run: 11250  
Number of cycles run: 1819  
Number of cycles run: 3187  
Number of cycles run: 2353  
Number of cycles run: 1420  
Number of cycles run: 4814  
Number of cycles run: 3556  
Number of cycles run: 22634  
Number of cycles run: 50000  
Number of cycles run: 11880  
Number of cycles run: 1442  
Number of cycles run: 3649  
Number of cycles run: 1940  
Number of cycles run: 2665  
Number of cycles run: 4502  
Av cycles for attraction strength 0.2 is 6070  
standard diviation is 10027.160921991339  
Testing average cycles for attraction strength 0.2  
Number of cycles run: 1062  
Number of cycles run: 2430  
Number of cycles run: 3977  
Number of cycles run: 50000  
Number of cycles run: 22502  
Number of cycles run: 9005  
Number of cycles run: 3385  
Number of cycles run: 4501  
Number of cycles run: 3189  
Number of cycles run: 2565  
Number of cycles run: 2475  
Number of cycles run: 2825  
Number of cycles run: 1822  
Number of cycles run: 4191  
Number of cycles run: 4754  
Number of cycles run: 1428  
Number of cycles run: 1084  
Number of cycles run: 2426  
Number of cycles run: 3596  
Number of cycles run: 21320  
Number of cycles run: 2954  
Number of cycles run: 4175  
Number of cycles run: 3035  
Number of cycles run: 2655  
Number of cycles run: 2816

Number of cycles run: 4233  
Number of cycles run: 3258  
Number of cycles run: 2017  
Number of cycles run: 4440  
Number of cycles run: 1111  
Number of cycles run: 2477  
Number of cycles run: 10861  
Number of cycles run: 7063  
Number of cycles run: 2401  
Number of cycles run: 2123  
Number of cycles run: 5125  
Number of cycles run: 1702  
Number of cycles run: 1984  
Number of cycles run: 1520  
Number of cycles run: 2699  
Number of cycles run: 1916  
Number of cycles run: 1956  
Number of cycles run: 3507  
Number of cycles run: 2340  
Number of cycles run: 3428  
Number of cycles run: 1341  
Number of cycles run: 3689  
Number of cycles run: 3458  
Number of cycles run: 3487  
Number of cycles run: 3181  
Av cycles for attraction strength 0.2 is 4909  
standard diviation is 7699.884203449466  
Testing average cycles for attraction strength 0.2  
Number of cycles run: 1111  
Number of cycles run: 2879  
Number of cycles run: 2716  
Number of cycles run: 1645  
Number of cycles run: 1615  
Number of cycles run: 1785  
Number of cycles run: 4199  
Number of cycles run: 3978  
Number of cycles run: 4178  
Number of cycles run: 3167  
Number of cycles run: 968  
Number of cycles run: 4696  
Number of cycles run: 50000  
Number of cycles run: 10803  
Number of cycles run: 2238  
Number of cycles run: 1821  
Number of cycles run: 3904  
Number of cycles run: 50000  
Number of cycles run: 2473  
Number of cycles run: 3053  
Number of cycles run: 36985  
Number of cycles run: 2112  
Number of cycles run: 21278  
Number of cycles run: 2719  
Number of cycles run: 2892  
Number of cycles run: 1175  
Number of cycles run: 3755  
Number of cycles run: 6213  
Number of cycles run: 2714  
Number of cycles run: 2503  
Number of cycles run: 3199  
Number of cycles run: 5413  
Number of cycles run: 2025  
Number of cycles run: 3071  
Number of cycles run: 1556  
Number of cycles run: 9596  
Number of cycles run: 12713  
Number of cycles run: 3023  
Number of cycles run: 5437  
Number of cycles run: 5818  
Number of cycles run: 2273  
Number of cycles run: 4121  
Number of cycles run: 1810  
Number of cycles run: 2233  
Number of cycles run: 4067  
Number of cycles run: 3999  
Number of cycles run: 1756  
Number of cycles run: 16497  
Number of cycles run: 1048  
Number of cycles run: 3296  
Av cycles for attraction strength 0.2 is 6650  
standard diviation is 10779.819411307786  
Testing average cycles for attraction strength 0.2  
Number of cycles run: 1700  
Number of cycles run: 5697  
Number of cycles run: 2182  
Number of cycles run: 3404  
Number of cycles run: 2408  
Number of cycles run: 4796  
Number of cycles run: 37019  
Number of cycles run: 2031  
Number of cycles run: 24030  
Number of cycles run: 1440  
Number of cycles run: 12018  
Number of cycles run: 2188  
Number of cycles run: 1881  
Number of cycles run: 23756  
Number of cycles run: 2201  
Number of cycles run: 3300  
Number of cycles run: 4548  
Number of cycles run: 1331  
Number of cycles run: 3147  
Number of cycles run: 1332  
Number of cycles run: 4441  
Number of cycles run: 50000  
Number of cycles run: 6039  
Number of cycles run: 1791  
Number of cycles run: 2603  
Number of cycles run: 3140  
Number of cycles run: 50000  
Number of cycles run: 2146  
Number of cycles run: 2420  
Number of cycles run: 31155  
Number of cycles run: 2630  
Number of cycles run: 1495  
Number of cycles run: 5020  
Number of cycles run: 1229  
Number of cycles run: 2586  
Number of cycles run: 17080  
Number of cycles run: 2894  
Number of cycles run: 3580  
Number of cycles run: 6325  
Number of cycles run: 5868  
Number of cycles run: 2563  
Number of cycles run: 3298  
Number of cycles run: 947  
Number of cycles run: 1569  
Number of cycles run: 1626  
Number of cycles run: 8845  
Number of cycles run: 2624  
Number of cycles run: 3103  
Number of cycles run: 2000  
Number of cycles run: 1734  
Av cycles for attraction strength 0.2 is 7423  
standard diviation is 11657.142391456573  
Testing average cycles for attraction strength 0.2  
Number of cycles run: 2953  
Number of cycles run: 2087  
Number of cycles run: 2691  
Number of cycles run: 5239  
Number of cycles run: 7100  
Number of cycles run: 2659  
Number of cycles run: 1200  
Number of cycles run: 5175  
Number of cycles run: 2542  
Number of cycles run: 4073  
Number of cycles run: 1602  
Number of cycles run: 3202  
Number of cycles run: 2069  
Number of cycles run: 3516  
Number of cycles run: 7316  
Number of cycles run: 50000  
Number of cycles run: 3405  
Number of cycles run: 2368  
Number of cycles run: 13392  
Number of cycles run: 1058  
Number of cycles run: 31671  
Number of cycles run: 4201  
Number of cycles run: 1397  
Number of cycles run: 2678  
Number of cycles run: 2171  
Number of cycles run: 3659  
Number of cycles run: 1974  
Number of cycles run: 2241  
Number of cycles run: 26041  
Number of cycles run: 1422  
Number of cycles run: 22080  
Number of cycles run: 2481  
Number of cycles run: 1670  
Number of cycles run: 3233  
Number of cycles run: 2468  
Number of cycles run: 3491  
Number of cycles run: 50000  
Number of cycles run: 2743  
Number of cycles run: 1617  
Number of cycles run: 3641  
Number of cycles run: 5401  
Number of cycles run: 4619  
Number of cycles run: 50000  
Number of cycles run: 1619  
Number of cycles run: 4005  
Number of cycles run: 2219  
Number of cycles run: 10545  
Number of cycles run: 1918  
Number of cycles run: 1481  
Number of cycles run: 2673  
Av cycles for attraction strength 0.2 is 7580  
standard diviation is 12411.449435394195  
Testing average cycles for attraction strength 0.2  
Number of cycles run: 965  
Number of cycles run: 1579  
Number of cycles run: 27178  
Number of cycles run: 17933  
Number of cycles run: 50000  
Number of cycles run: 3045  
Number of cycles run: 2317  
Number of cycles run: 39004  
Number of cycles run: 3270  
Number of cycles run: 2742  
Number of cycles run: 1838  
Number of cycles run: 18201  
Number of cycles run: 4908  
Number of cycles run: 4101  
Number of cycles run: 1184  
Number of cycles run: 2010  
Number of cycles run: 2175  
Number of cycles run: 2060  
Number of cycles run: 6600  
Number of cycles run: 3659  
Number of cycles run: 2509  
Number of cycles run: 2163  
Number of cycles run: 1159  
Number of cycles run: 1953  
Number of cycles run: 1854  
Number of cycles run: 2133  
Number of cycles run: 4315  
Number of cycles run: 1959  
Number of cycles run: 2076  
Number of cycles run: 1306  
Number of cycles run: 7275  
Number of cycles run: 3406  
Number of cycles run: 994  
Number of cycles run: 3130  
Number of cycles run: 4029  
Number of cycles run: 25050  
Number of cycles run: 1050  
Number of cycles run: 2196  
Number of cycles run: 1898  
Number of cycles run: 2225  
Number of cycles run: 3432  
Number of cycles run: 1581  
Number of cycles run: 1739  
Number of cycles run: 5217  
Number of cycles run: 11150  
Number of cycles run: 30887  
Number of cycles run: 3638  
Number of cycles run: 2410  
Number of cycles run: 2241  
Number of cycles run: 3255  
Av cycles for attraction strength 0.2 is 6659  
standard diviation is 10390.937755976185