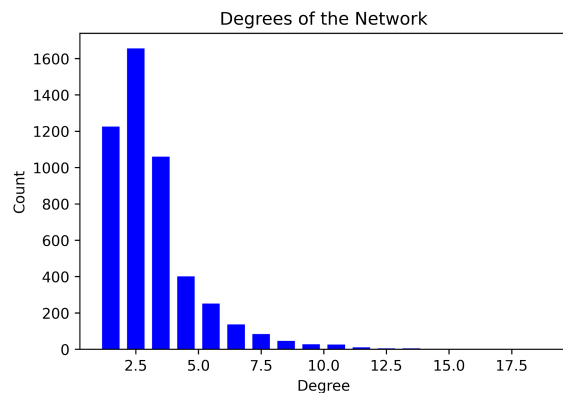


Youcan Liang  
Prof. Marta C. González  
CE 88/CP 88  
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I chose the dataset of power grids. The nodes represent power plants, transformers or consumers. The links represent physical cable connections. The links should be directional because power plants send electricity to consumers while consumers don't send electricity to power plants in most cases.



The average clustering coefficient: 0.04005180554079856  
Average shortest path length: 0.002764032588593992  
Largest clustering coefficient: 0.5

Nodes with largest clustering coefficient: [30, 142, 167, 149, 152, 175, 110, 84, 366, 243, 371, 312, 289, 367, 368, 381, 369, 264, 281, 460, 489, 505, 580, 677, 877, 880, 890, 935, 977, 1196, 2135, 1322, 2184, 1483, 1805, 1558, 1775, 1857, 1918, 1856, 2043, 1617, 1700, 1673, 1898, 2088, 2149, 1868, 2232, 2295, 2403, 2333, 2331, 2289, 2341, 2377, 2299, 2300, 3094, 2719, 3043, 3228, 2525, 2716, 3244, 3279, 2478, 2958, 2989, 3214, 3252, 3113, 2514, 3036, 2520, 3181, 3112, 3179, 3055, 2920, 3207, 2809, 2845, 2995, 3096, 3141, 3149, 2972, 3097, 3205, 3277, 2720, 2911, 3095, 3158, 3199, 3215, 3157, 2652, 3178, 3077, 2684, 2969, 3104, 3200, 3221, 3026, 3143, 2678, 2714, 2758, 3050, 3098, 3099, 2891, 3145, 3180, 3171, 2696, 3133, 3134, 3190, 3270, 2745, 2706, 3263, 2811, 2757, 2756, 3061, 3265, 3042, 2774, 2968, 2784, 3267, 3150, 3211, 3222, 3253, 3238, 2903, 3079, 3116, 3198, 2866, 3131, 2865, 3250, 2935, 3018, 3213, 3038, 3126, 3130, 3275, 3028, 3153, 2879, 3111, 2998, 3230, 2996, 3245, 3020, 3033, 3034, 3063, 3109, 3121, 3148, 3161, 3232, 3235, 3118, 3119, 3209, 3269, 3030, 3059, 3065, 3159, 3202, 3092, 3144, 3246, 3558, 3632, 3725, 3399, 3747, 3748, 3417, 3436, 3633, 3931, 3935, 3921, 3876, 3928, 3805, 3837, 3920, 3860, 3865, 3867, 3884, 3953, 4064, 4018, 4136, 4159, 4150, 4400, 4337, 4411, 4406, 4419, 4354, 4405, 4799]

The longest shortest path is constituted with 13 nodes and the path is [1121, 1122, 1275, 1307, 1308, 2594, 2605, 2606, 2607, 2608, 2623, 2979, 3054].