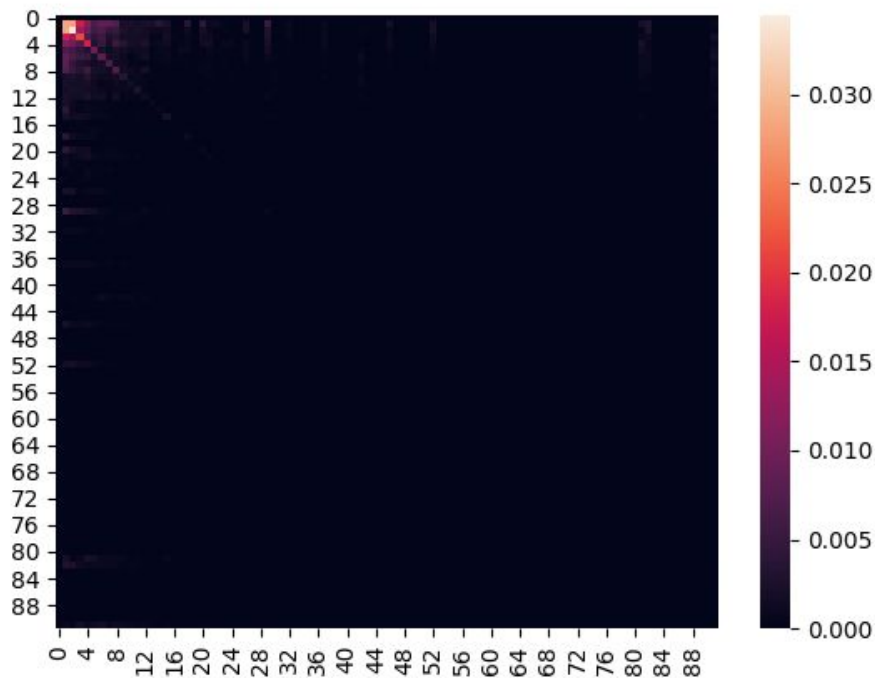


Homework - 9

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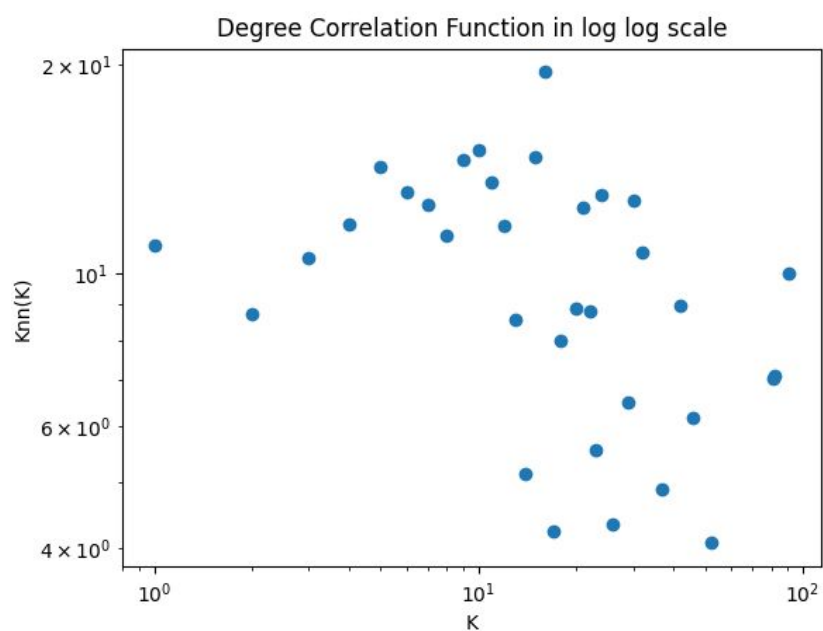
Student: Paulo Junio Reis Rodrigues

1 - a)



This degree correlation matrix represents the correlation between K_i to K_j , it means, which is the probability of finding a node with degrees i and j at the two ends of a randomly selected link. In the above matrix we see a large correlation between low degrees. Thus, it means this network is disassortative.

b)



This degree correlation function represents the average degree of neighbors of K , in the above chart we see that some hubs prefer to link to low-degree nodes. However, there still are nodes that don't. Hence, it means this network is disassortative, but only a few characteristics are present.

c) The degree correlation coefficient is -0.0550781 , thus this network is disassortative.

