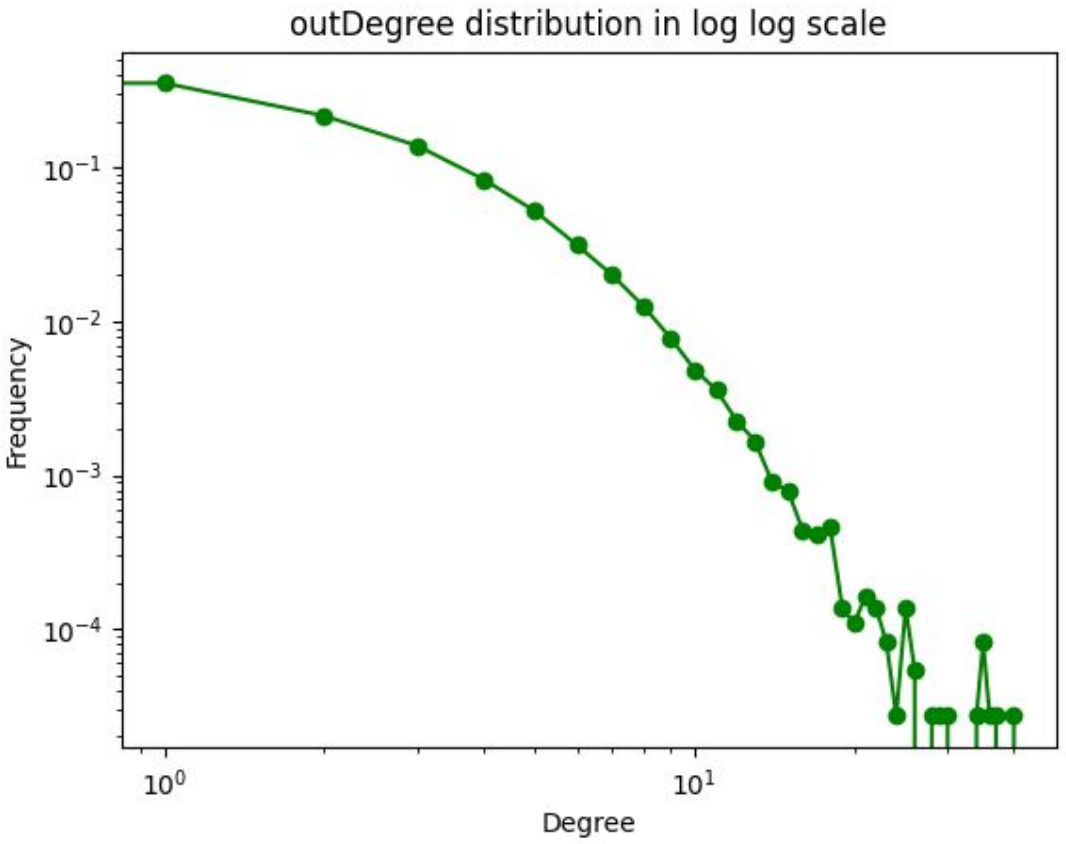
HomeWork - 04
Student : Paulo Junio Reis Rodrigues
RA: 265674

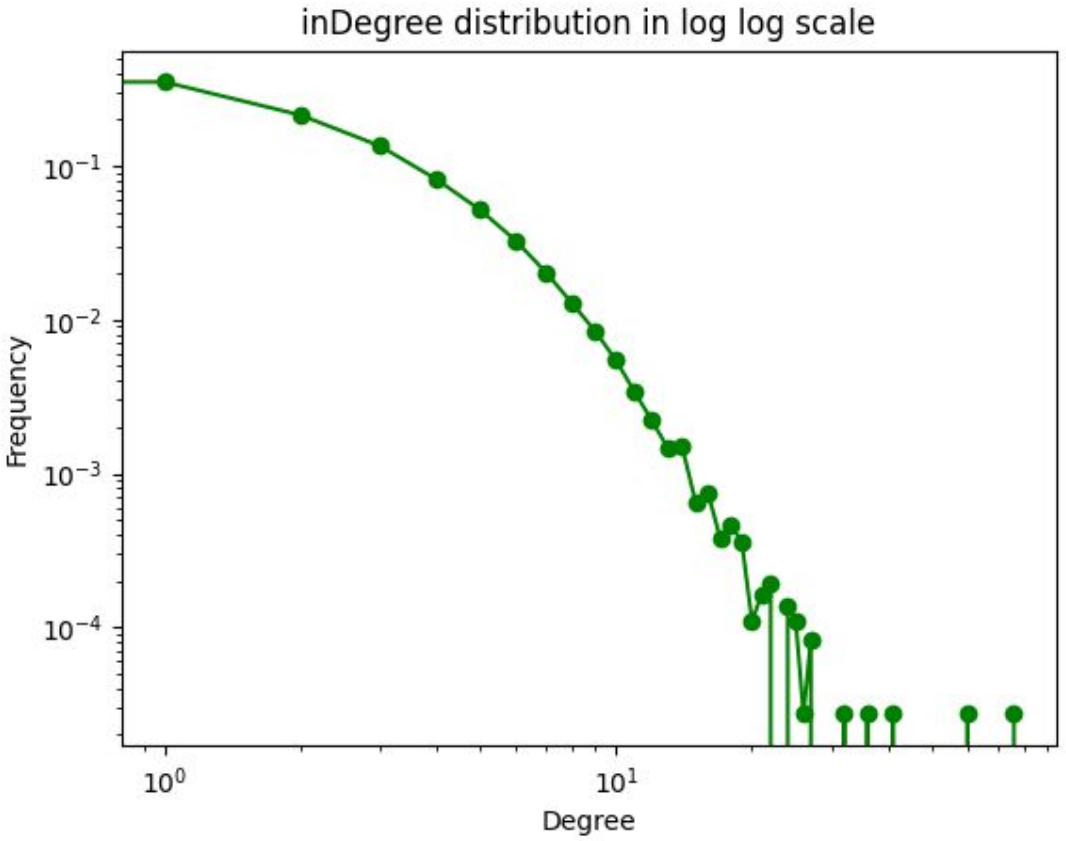
A - Out Degree loglog distribution :



Answer: Isn’t like a pure power law, because this out degree distribution isn't like a straight line in log-log scale, in loglog scale, power law is a straight line. And his distribution it’s a smaller than the original power law, the number of nodes is 36595 and the high out degree is 41, it is smaller than power law distribution.

B - Yes, this outgoing degree distribution has a low degree saturation and a high degree cutoff. For low grade saturation, there isn’t much zero degree in the network, causing the effect. However if we just visualize this logarithmic scale, we can say that the pronounced event is high degree cutoff, because this scale has some problems with high degree distribution (high-degree is 41) for 36595 nodes and indicating that we have fewer high degree nodes than expected in a pure power law.

C - In Degree loglog distribution :



D - This ingoing degree distribution has a low degree saturation and a high degree cutoff. The same problems of outgoing degrees. For low grade saturation, there isn't much zero degree in the network, and for a high degree cutoff this network has high ingoing degree = 77 for 36595 nodes and indicating that we have fewer high degree nodes than expected in a pure power law.