

Graph

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1 Summary

I checked the diameter of 100 graphs with 100 vertices ranging the probability of creating an edge (u, v) between $[0.4, 0.9]$ with increment's of 0.05. To get the mean diameter over the graphs below was used for the calculation,

$$meanDiameter = \sum_{n=1}^{100} \frac{DiameterOfGraph_n}{totalGraphs}.$$

To my findings the mean diameter was rather small. The mean diameter was descending as the probability of creating an edge increased.



To test generating a graph with the empty constructor, I created a .txt file with a edge represented by a single line such as "3, 5" where 3 and 5 represent vertices. A graph was successfully generated after some time...