**Random Network Visualizer Program**

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Objective of Program: We would like to visualize Random Networks (as featured in the 주탐 lecture about networks) using the matplotlib module in Python.

**Characteristics of Random Network**

cf) The previously developed Erdős–Rényi model featured a uniform probability for any node to be connected. Therefore, when a new edge is added to the network, that connection was independent from the previous configuration of the network.

In contrast, the probability in which two nodes are connected is not uniform in a Random Network. The probability depends on how many edges are connected to a node: the more edges connected, the more likely an additional edge could be connected to the node. The specific probability mass function (PMF) can vary by one’s discretion. In this program, we will feature 2 versions: one in which the probability is proportional with number of edges connected (to a node), and one in which the probability is proportional with that number squared. The second version was hypothesized to test a similarity between these random network visualizers and Newton’s law of physics.

**Program Algorithm**

The number of nodes and edges will be based on user input.

To keep track of how many edges