Lab 5 Network Models

1. Please fill in the following table with the observations you get from the lab

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | # nodes | # edges | Degree Distribution (power-law?) | Clustering Coefficients |
| Real Graph | 41773 | 125826 | yes | 0.0912123373083256 |
| Random Graph | 41773 | 125488 | no | 5.585745178304965e-05 |
| Small World Model | 41773 | 125319 | no | 0.10268819081927555 |
| Preferential Attachment | 41773 | 125310 | yes | 0.0015988403372000103 |

2. Please Attach the Degree Distributions of Each Graph

Real Graph

Chart, histogram

Description automatically generated

Random Graph

Chart, histogram

Description automatically generated

Small Word Model

Chart, histogram

Description automatically generated

Preferential Attachment ModelsChart

Description automatically generated