Pajek Instruction 3

Now you should already have Pajek 2.* installed in your computer. Otherwise, please refer to our "Pajek Instruction 1" HERE.

If instead you have Pajek 3.*, please refer to the following link for a list of changes made from Pajek 2.* to 3,*. (Thanks Jordi, among all discussants in the forum). http://mrvar.fdv.uni-lj.si/pajek/Pajek205to301.htm

Open Pajek and load the data set:

- go to the "File" tab at the top of the Pajek page
- go to the "Network" in the dropdown
- select "read"
- find the directory where you have stored the data "Ring25.NET", and open it.

Using Pajek add a link
(for instance, "1-13" i.e. an undirected link between nodes 1 and 13):

- find the bar "Networks"
- click the third button on left ("Edit Network")
- when asked "Select vertex number or vertex label", input the node whose link you want to add (for example, input 1)
- you should see a window summarizing all links that the node (1) has
- double click "Newline"
- input the node you want to link to (for example, input 13)
  - if you want directed link(s): add "+" or "-" in front of the node

Redo this until you have added all links you want.

Using Pajek delete a link
(for instance, "3-1" i.e. an undirected link between nodes 3 and 1):

- find the bar "Networks"
- click the third button on left ("Edit Network")
- when asked "Select vertex number or vertex label", input the node whose link you want to delete (for example, input 3)
- you should see a window summarizing all links that the node (3) has
- double click the link you want to delete (for example, "1-3"), and click "Yes"
  - since the network is undirected, by deleting "1-3" you also delete "3-1"

Redo this until you have deleted all links you want to delete.

Using Pajek calculate diameter of the network:

- go to the "Net" tab at the top of the Pajek page
- click "Paths between 2 vertices"
- click "Diameter"
- in the window "Report", you can find the Diameter

Using Pajek calculate average clustering coefficient:

- go to the "Net" tab at the top of the Pajek page
- click "Vector"
- click "Clustering"
- click "CC1"
- a window named "report" should appear from where you can find "Watts-Strogatz Clustering Coefficient"

You are encouraged to generate random network(s) with 25 nodes and similar average degree (4), then examine the diameter and average clustering coefficient there. Recall:

Using Pajek, generate random networks:

- go to the "net" tab at the top of the Pajek page
- click "Random Network", then "Bernoulli/Poisson"
- click "Undirected", then "General"
- input "25" when asked "How many vertices"
- input "4", when asked "Average degree of vertices"