## Solution of exercise 2 from chapter 10

## Part 1: convert the networks

First, convert the networks using pyNetConv tool. You can use the command line tool or the GUI to achieve this. With the command:

\$ netconv-gui.py

the GUI will show up as shown in the figure.

7% pyNetConv - Network Conversion Tool	_	
select format	choose file	Import
select format 💷	choose file	·
Statsistics		
0 nodes		
0 edges		
0 clusters		
Expression data not loaded		
Export		
select format	choose file	Export
select format 💴	choose file	

You can then load the network and convert it using the interface:

7% pyNetConv - Network Conversion Tool	_	
Import		
Pajek .net 💷 glycolysis.net	choose file	Import
select format 💷	choose file	
Statsistics		
45 nodes		
114 edges		
0 clusters		
Expression data not loaded		
Export		
Cytoscape .sif 🛁 glycolysis.sif	choose file	Export
select format 💷	choose file	

Then, you can do the same to the other network:

74 pyNetConv - Network Conversion Tool	_	
Import		
Pajek .net 🖂 glynocurrency.net	choose file	Import
select format	choose file	
Statsistics		
30 nodes		
38 edges		
0 clusters		
Expression data not loaded		
Export		
Cytoscape .sif 🛁 glynocurrency.sif	choose file	Export
select format 💷	choose file	

## Part 2: Viewing the networks in Cytoscape

After loading the netwok in Cytoscape, you'll see an status like this:

Loading Networ	k	×
Description: Status:	Loading Network Succesfully loaded network from: glycolysis.sif	Close
	Network contains 45 nodes and 92 edges.	
	Network is under 500 nodes. A view will be automatically created.	
Progress:	••••••	

The network is loaded:

🎯 Cytoscape Desktop		×
File Edit Data Select Layout Visualizat	ition Plugins Help Credits Filters	
🐴 📩 🔜 🛧 4	📩 🔀 🕞 💢 o 🚱 o 🏶 default 💌 o 🎉	
Network Nodes Edges   glycolys glycolysis.sif 45(0) 92(0)		0
Nodes.	Liefe Perecean Edani ve fe proceed.	



And, after applying some layout to make it look better:

## Part 3: Network decomposition

To decompose, use the cluster tool. the command line and output of the commands are shown below.

Note: All files generated in this tutorial are attached.