1. Select amount of nodes according to the rule: N = 2000 + XXX,

where XXX are the last of three numbers of your I.D. Build a network according to follow model:

A graph composed by K clusters (K = XX, where XX is the last pair of numbers in your I.D.). The clusters should be with a size randomly varied from 20 to 50 nodes. The probability of any two nodes from the same cluster to be connected is 0.6, from different clusters is 30/N.

1. Make clustering of the graph with the help of Markov algorithm
2. Investigate dependence of the clustering on the parameters of the algorithm.
3. Make comparative visualization of different results of clustering and initial (correct) clustering.
4. Make a report with describing of your work (in "word"), containing:

a) network pictures (at least 4);

b) detailed description of the results;

c) for which parameters the results are better?

d) if some part of your code was taken from somewhere, write correspondent references;

e) Make conclusion concerning to quality of the applied method;