

## Task 7. Algorithms on graphs. Tools for network analysis

### **Goal**

The use of the network analysis software Gephi

### **Problems and methods**

1. Download and install Gephi from <https://gephi.org/>.
2. Choose a network dataset from <https://snap.stanford.edu/data/> with number of nodes at most 10000. You are free to choose the network nature and type (un/weighted, un/directed).
3. Change the format of the dataset for that accepted by Gephi (.csv, .xls, .edges, etc.), if necessary.
4. Upload and process the dataset in Gephi. Check if the parameters of import and data are correct.
5. Obtain a graph layout of two different types.
6. Calculate available network measures in Statistics provided by Gephi.
7. Analyze the results for the network chosen.

### **Comments**

While performing the work, screenshot the main steps you are doing and insert in the report.

### **The report should be a pdf-document containing**

- Task number and its topic, your group name, your name and surname, the report date;
- code of your programs required values and graphs, as well as analysis of the results.

**Reports must be sent to [chunaev@itmo.ru](mailto:chunaev@itmo.ru) no later than three weeks after the task is given in English.  
Use the following format for the email subject: Task #, Name Surname, Group.**