Please upload your solutions to Ilias. Deadline: 22th December 23.55 pm

Exercise 5

1) Use one non-deterministic layout algorithm (e.g. Spring Embedder) and generate 5 layouts for 6 graph files (Choose from the Rome library: 2 of size 20, 2 of size 50 and 2 of size 100, http://www.graphdrawing.org/data.html). Make sure to check if you have to change the random seed in order to get sufficiently different layouts. Order them according to your preferences. Afterwards, calculate and compare three different quality criteria of your choice. Do these measurements correlate with your preference ordering?

2) Calculate an orthogonal layout for each graph in NW_task2 directory. Calculate and compare the number of bends in comparison to graph size and the bends per edge. Compute the stress minimization layout for each graph and state your preference for the two layouts per graph in a range of -5 to 5. State if there are any features or characteristics of the layout that contributes to your preference.

20 points