

Exercise No. 7
Peer-To-Peer Networks
Summer 2010

Exercise 1 *Distance Halving*

The out-degree of the continuous graph in Distance Halving is three. Devise your own version of Distance Halving, that increases the search speed by factor two by increasing the out-degree and prove its correctness.

Exercise 2 *Skip-Graph*

Alter the base of the addresses in Skip-Graph from binary to hexadecimal. Analyse the resulting

- diameter,
- search speed, and
- longest common prefix of the num-ID.