This is a simple programe written in R for calculating the total effect of a node, as well as the net effect it exerts and receives up to n steps in a signed digraph. The format of the input data as a .txt file is as follows:

A B 1

C D 1

A C -1

The first line says A influences B positively; the second line says C influences D positively; and the third line says A influences C negatively.

Note that in a friend-enemy nominating network, if A nominates B as a friend, then we assume B can influence A positively. And if C nominates D as an enemy, then we assume D can influence C negatively.

In the code, the user needs to specify the full path of the stored dataset, and manually sets the number of steps used in the calculation (i.e., the numstep variable in the code).