**Format of the .g files**

Each .g file describes a graph of users and their coaching relations. The first line is an integer *n* denoting the number of users in the graph. The next line contains the name of each user separated by a single space, and the next *n* lines describes the coaching and student relation between the users. The first of these *n* lines describes the coaches and students of the 1st user, the 2nd of these *n* lines describes the coaches and students of the 2nd user, the 3rd of these *n* lines describes the coaches and students of the 3rd user and so on. All the names after a # and before a $ are the coaches of a particular user and all the names after a $ are the students of a particular user. In the case where a particular user has coaches and students, the coaches are always described first. The example below illustrates how to create such a .g file.

5 (number of users)

A B C D E (the names of the users – A, B, C, D, E)

$ B C (coaching relations of user A – since there are no #’s A only has 2 students B, C

# A $ D E (coaching relations of user B – B has A as coach and students D and E)

# A (coaching relations of user C – C only has one coach, A)

# B (coaching relations of user D – D only has one coach, B)

# B (coaching relations of user E – E only has one coach, B)