This project includes the source code, test bed of instances and the complete experimental results of the paper "A Fast Algorithm to Compute Maximum k-Plexes in Social Network Analysis".

An instance of our test bed is a simple undirected graph, described with the following format:

n m k

u_1 v_1

u_2 v_2

…

u_m v_m

where n is the number of the vertices, m is the number of the edges, k is the parameter of the maximum k-plex problem, and u_i v_i indicate the edges of the graph.

To use the source code, firstly, store the input file name(output file name) into the character array "infile"("outfile") and then run the code. The program will print the interval $[a,\ b]$ to denote that the optimal value is between a and b.